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ABSTRACT

The purpose of this study was to examine the use made of the Educational Resources Information Center (ERIC) products and services by members of the educational community, and in this context to evaluate the extent to which the ERIC system is achieving its objectives of guaranteeing ready access to the nation's current significant literature in the field of education. The report is prepared in four volumes and a summary volume. This volume contains the introduction and summary of findings and recommendations which are also given in the summary volume (see LI 003628). Chapter 3 discusses the characteristics of ERIC users and as such it contains sections dealing with: the target population, sampling frame and returns; general background information of ERIC users; the primary professional role of ERIC users; the channels ERIC users employ to obtain information; communication among educators; publication record of ERIC users; the research affiliation of ERIC users; and the outside responsibilities of ERIC users. The material in Chapter 4 demonstrates the extent to which ERIC is meeting its first goal: to make significant but previously unavailable documents easily available to the educational community. (The other volumes of this study are available as LI 003628, and 003630 through 003632.) (Author/NH)

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FINAL REPORT

Project No. BR 00375
Grant No. OEC-0-70-3271

Evaluation Study of ERIC Products and Services

Complete in Four Volumes
Including One Appendix Volume

VOLUME I OF IV

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ABSTRACT

This report describes an 18-month evaluation study of ERIC products and services by a team of faculty and graduate students at Indiana University. Data gathering and analysis of use and user reaction were undertaken on a large scale, with principal reliance on five questionnaires directed to ERIC users in representative educational communities. Data from samples, which produced approximately 2,500 returned questionnaires, were supplemented by descriptive and recorded data, site interviews, and expert opinion of advisory panels.

Users judged the ERIC system as a whole very favorably. Nine of ten individual users reported that they obtained information from ERIC products and services which they probably would not have found otherwise. The findings call attention to conditions, trends and issues concerning use and user reactions to ERIC products and services. They attempt to evaluate the extent to which ERIC has met its goal of guaranteeing ready access to the nation's current significant literature in the field of education. Deficiencies and weaknesses are identified and recommendations are made for needed improvements and corrective action.

The report is prepared in four volumes including an appendix volume of supplementary and parallel tables. Additionally, a summary volume, comprising the first two chapters covering the Introduction and the Summary of Findings and Recommendations, was issued separately.

EVALUATION STUDY OF ERIC PRODUCTS AND SERVICES

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PREFACE

Although the literature of the evaluation of document-information transfer systems is voluminous, few evaluations of such systems or services, operational or experimental, have actually been conducted. Evaluation implies quantification but in the field of document-information services there has been a continuing lack of consensus concerning what to measure, how to measure, and how to interpret the results.

It is important to distinquish between evaluation of an operating retrieval system such as the Medical Literature Analysis and Retrieval System (MEDLARS), which is essentially an analytical and diagnostic procedure, and evaluation of ERIC products and services, which employs survey techniques to measure use and user reaction.

The results of this evaluation study are set forth in the four volumes of the final report, the first three of which include the analysis and core data collected. The fourth volume contains supplementary and parallel tables keyed to chapters of the report. Additionally, a summary volume has been issued separately comprising the first two chapters, which cover the Introduction and the Summary of Findings and the Recommendations.

The conduct of such a survey and the genesis of a report of this broad subject necessarily required the help and contributions of a large number of individuals, faculty and graduate students, of the Graduate Library School, the School of Education, and other departments of Indiana University, including the Institute for Research in Public Safety which provided assistance in the latter stages of the study.

Although the preparation of the report was primarily the responsibility of the principal investigator, it reflects work carried out by the entire project team. The team included Bernard M. Fry, principal investigator, Alice R. Jwaideh and Margaret I. Rufsvold, co-principal investigators, Donald J. Cunningham, associate investigator; Miles A. Libbey, James Huber, and Carolyn Mullins. They were assisted by Janet Elkins, who handled the complex operations of the project office most responsively and ensured order and timeliness in the massive flow of paper emanating from and received by the study team.

Also to be thanked are the graduate students who participated in various parts of the study: Kenneth Brown, Robin Dalton, Margo Marsh, Grace Moser, Michael Ormiston, and John Wendt.

The study also benefited greatly from consulting assistance of a number of education specialists and other key individuals in the field who made significant contributions to the design and conduct of the study and helped in improving early drafts of the report. They included: Roger C. Farr, William P. Gephart, Donald M. Goldenbaum, Carolyn Guss, John Hemmeter, William Kuvlesky, Robert R. Lange, William Loadman, Martha L. Manheimer, Keith W. Mielke, James R. Sanders, Edward G. Summers.

We are also indebted to the twelve educators, librarians, and information center managers who composed the two advisory panels for this study, and whose frank comments and criticisms are reflected in the summary of their recommendations in Volume III. (Chapter 1 of Volume III lists the members of the ERIC Study Advisory Panels and indicates the nature of their interaction with the study team.)

Our thanks also go to Patricia Sullivan of the Division of Information Resources, Office of Education, for her continuous efforts throughout the entire study to furnish requested information and materials and to facilitate the progress of the study. And last, but by no means least, we are grateful for the patient and effective work of Marjorie Shepley in the office of the principal investigator for the editing and preparation of the several drafts of the report.

Chapter 1

INTRODUCTION

The Educational Resources Information Center (ERIC) is a national education information system established by the U.S. Office of Education, National Center for Educational Communication (NCEC). As a major component, ERIC supports NCEC's mission to accelerate nationwide use of successful educational practices and research-based instructional materials. Now in its fifth year of operation, ERIC has evolved as a major, comprehensive, national document transfer and information system.

The overall goal of the ERIC program is to furnish ready access to the nation's current significant knowledge that can be used in developing more effective educational programs. ERIC allows any educator or person interested in any aspect of educational development to identify and obtain quickly reports of exemplary programs, research results, and evaluation studies in his specific area of interest from thousands of selected documents that otherwise would have been impossible for any single organization or person to locate.

Through a network of nineteen specialized centers, or clearinghouses, each of which is responsible for a particular educational area, the information is monitored, acquired, evaluated, abstracted, indexed, listed, and made available through a variety of ERIC products and services. These reference publications and services thus provide access to reports of innovative programs and the most significant efforts in educational research. The ERIC system is capable of making a major contribution to practitioners and researchers alike in terms of helping them to develop a continuously regenerative system.

Students, teachers, researchers, board members, advisory groups, and administrators continually function without adequate benefit of pertinent findings -- perhaps mostly because of lack of time to "review the literature." Pertinent information concerning the results of research, development, experimentation and evaluation is available in myriad publications of all kinds; however, the typical educator-user cannot hope to find time to collect and analyze such numerous and diverse sources of information directly. His only hope is to rely upon systematic collection and dissemination programs such as ERIC.

The purpose of this study was to examine the use made of ERIC products and services by members of the educational community, and in this context to evaluate the extent to which the ERIC system is achieving its objectives. The initial objectives set for the ERIC program were:

*to make significant, but previously unavailable R & D reports easily and readily available to educators *to interpret and summarize results in ways that educational practitioners and decision-makers can use them

*to help strengthen existing educational communication channels for putting R & D results to use

*to become an important base for developing a national education information network

In the five years since its establishment, the multi-faceted document and information functions of ERIC have contributed importantly to an evolving national education information network, upon which new communication programs are being developed.

This study has focused on evaluation of products and services and has not undertaken to assess program concerns of ERIC not directly related to products and services.

Specifically, the study has attempted to provide information on the following questions:

1) The extent to which educators actually use the various ERIC services and products. In addition to investigating the frequency of use of the various services, an attempt was also made to examine the patterns of use.

2) The purposes for which ERIC services and products are used (e.g., to keep abreast in a field, assignments and term papers; curriculum development; program improvement; preparation of speech, report, article, research project; browsing, etc.)

3) The characteristics of users and non-users of ERIC services and also the differences between "heavy" and "light" users. Background variables examined included age, sex, occupation, position, academic degree, opinion leadership within the profession, general "activity" pattern, and information habits, including the extent to which "users" were also users of other information sources.

4) The extent to which educators are informed about the ERIC program, and the sources of their information. An assessment of the present awareness and knowledgeability of educators about the program will help to determine whether, and in what ways, the ERIC system needs to publicize its activities and services more widely.

5) Reasons for non-use, including insufficient knowledge, inconvenience, unavailability of needed materials, and preference for alternative sources of information. An attempt was also made to find out why infrequent users did not use the ERIC system more, as well as why those who have tried it have stopped using the system.

6) Suggestions for improvements in ERIC services and products. Respondents were asked what kinds of changes or extensions of present services would fit their needs better. Summaries of information and data resulting from this evaluation study together with findings, conclusions, and recommendations, have been prepared for review by NCEC and the ERIC staff for the purpose of identifying deficiencies and recommending needed improvements.

7) The overall impact of the ERIC program in meeting the information needs of educators and researchers, measured in terms of its effects upon their patterns of information-seeking and information use.

Categories for Analysis

The key categories used for analysis matched output measures against user populations. A cross-classification of these has served as a basic framework for summaries and synthesis of major findings regarding intensity and frequency of use, type of use, and use satisfaction.

1) ERIC PRODUCT AND SERVICE CATEGORIES

Document Availability

- Hard copy
- Microfiche

Index/Abstract Journals

- RIE
- RIE Accumulated Indexes
- CIJE

Indexes to Special Collections

- Pacesetters in Innovation
- Catalog of Selected Documents on the Disadvantaged
- Selected Documents in Higher Education
- Manpower Research Inventory
- OE Research Reports

Information Analysis Products

- Interpretative Summaries (State-of-knowledge)
- Research Reviews
- Bibliographies

Dissemination Programs

- Clearinghouse Newsletters
- Professional Journal Columns
- Brochures and Audio-Visual Materials
- Professional Societies
- State and local agencies
- Personal contacts

Reference Services

Thesaurus of ERIC Descriptors

2) USER OCCUPATION CATEGORIES EXPLORED

Administration

Teaching

Pupil Personnel Service

Research and Development

Library

Consulting

Undergraduate

Graduate

3) ORGANIZATION CATEGORIES EXPLORED

Pre-School

Elementary School

Secondary School

College or University

State Department of Education

Regional Education Laboratory

Research and Development Centers

Professional Organization

OE Regional Office

Other Federal Agency

Local or Regional Information Center

Reading Resource Network Center

Business or Industry

Diffusion Models

This study examined only direct use of information products within specialized user groups. This approach was based on a simple one-step diffusion model in which information moves from the ERIC system directly to the ultimate user (Diagram 1). In reality, the information diffusion process often involves at least several steps or linkages of exchange, particularly where local school staff is concerned (Diagram 2). Consequently, while this investigation attempts to provide an accurate picture of direct use of ERIC materials by the relevant publics selected for study, it probably underestimates the information impact of ERIC on local school staff and university students because these publics are tied in through intermediate linkages which were not within the scope of this study. Any future study of ERIC's impact should go beyond simple direct uses of product alternatives, especially for local school publics.

Diagram 1

Single Step Diffusion Model Latent in Structuring
This Investigation of ERIC Product Utilization

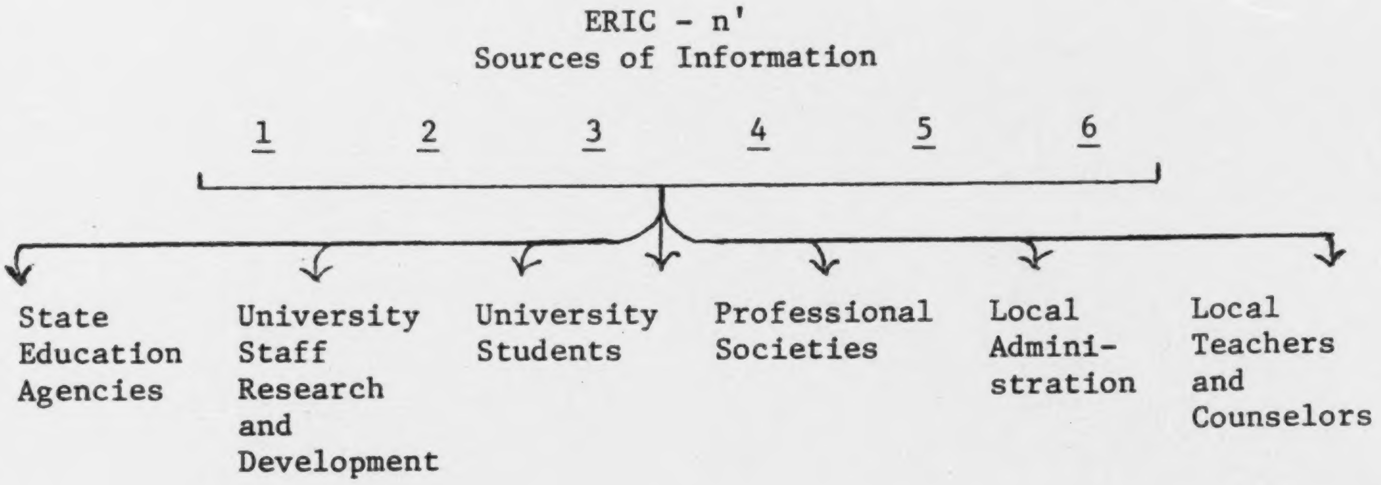
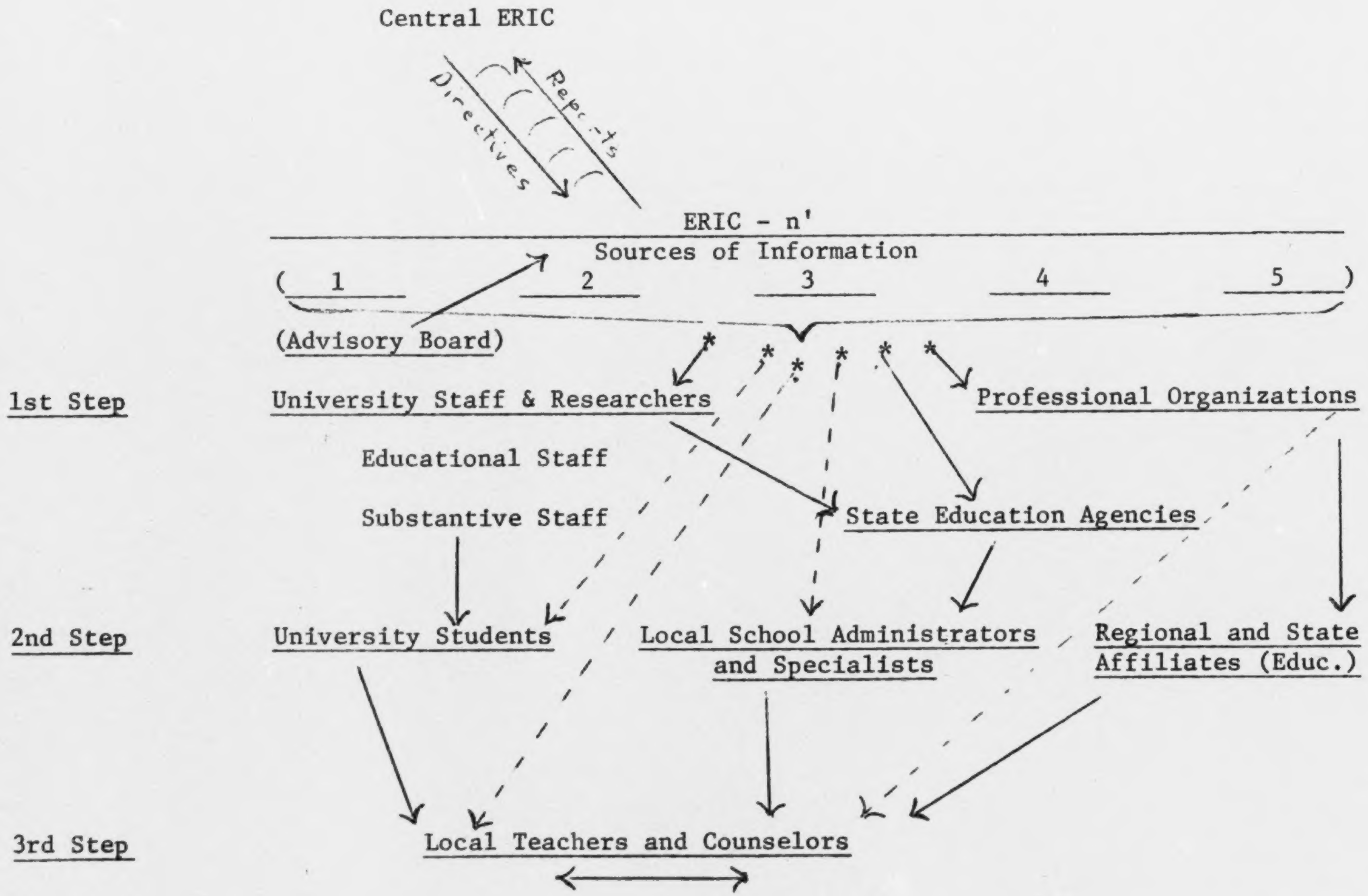


Diagram 2 Stepwise Diffusion Model for ERIC Materials and Information



_____Primary Linkages

------Secondary Linkages

*Lines of Diffusion Examined in This Study

Summary of Methodology

An account of the design and conduct of this evaluation study is contained in Chapter 1, Volume III, of this report. All tables cited in this summary of methodology also appear in Volume III. Table A1A.7 presents a review of populations, samples, and returns. The principal sources of data for this study were derived from five samples:

1) Individual User questionnaire, using a controlled sampling procedure (494 respondents). This questionnaire was administered by educational institutions to a broad cross-section of users of ERIC products and services. Eighty-one percent of institutions sampled responded. These included institutions holding complete ERIC standing order collections, both private and OE supported, educational information centers, and Reading Resources Network Centers.

2) Organization questionnaire, which included a sample size of 441 organizations, with an average return from sub-samples of 83%. The organization questionnaires were sent to six target populations, carefully screened to prevent duplication. The populations queried included OE supported standing order collections at Clearinghouses; OE Regional Offices; and Regional Educational Laboratories; privately supported standing orders; Reading Resources Network Centers; educational information centers; State Departments of Education; and EDRS individual or demand orders. Information on the procedure and response returns for these six populations is summarized in Tables A1A.1 and A1A.2.

3) *CIJE* questionnaire, with a sample size of 398 representing 100% of individual and 25% of institutional subscribers. That section of the Individual User questionnaire pertaining to *CIJE* was further administered to the subscriber population and was used in this analysis for supportive purposes only because of the low response rate of 54%. Further information on the procedure and response rates for the *CIJE* questionnaire is summarized in Table A1A.4.

4) *RIE* questionnaire, with a sample size of 1025 representing 100% of individual and 25% of institutional subscribers. That section of the Individual User questionnaire pertaining to *RIE* was further administered to the subscriber population and was used in this analysis for supportive purposes only because of the low response rate of 51%. Further information on the procedure and response rates for the *RIE* questionnaire is summarized in Table A1A.5.

5) Professional Journal questionnaire, which was administered to a sample of 4318 individual subscribers to five representative educational journals which regularly feature a column about ERIC products and services. A 5% sample was taken of these journals for which the number of subscribers ranged from 6,500 to 37,000. A total of 1011 useable questionnaires was returned in time for analysis. Individual sample sizes and returns are shown in Table A1A.6.

The objective data drawn from questionnaires were supplemented and expanded with data gathered through 31 site visits by the project staff (See Table A1B.1). Additional data were collected from two advisory groups of twelve experts in the field of educational information dissemination. The list of members of the ERIC Study Advisory Panels is included as Table A1B.2.

Descriptive data referred to in the study have been obtained from Central ERIC, Clearinghouse Quarterly Reports, and EDRS sales and distribution records. These data were fully identified in Chapter 1 of Volume III of this report and are cited in relevant figures and tables.

In summary, these data sources have provided a comprehensive overview of a very complex information system. Taken together these data sources have provided a multi-dimensional survey by bringing together data from individual users, observed data from multiple samples of organizations providing service, and data from journal subscribers, including both *RIE* and *CIJE* as well as representative professional educational journals. Finally, purchasers of individual documents were sampled on a random basis. In every instance but the last it was possible to prevent overlap and duplication of sources. Site interviews, phone calls and correspondence were utilized for follow-up and assessment of the representativeness of samples and possible bias.

In order to permit ease of reference from the Summary Findings to the specific data upon which they are based, each topical group of findings is keyed to the relevant data sources.

Assumptions on Non-respondents

An inherent problem in any survey research is that of the non-respondent. A lack of response tends to make the data unreliable, thereby reducing the validity of generalizations to the universe based on the sample statistics. Two methods for combating this problem are: (1) increase the response rate (a 70-80% return rate is generally accepted as a minimum rate); or (2) investigate the characteristics of the non-respondents upon which qualified generalizations can be made.

With the exception of the EDRS "demand" orders, the response rates of the organizations' questionnaires were acceptable (range of 69-100%). The same was true without exception of the individual users' questionnaires (range of 73-90%). The response rates of the *RIE* and *CIJE* subscribers' questionnaires were typical of mailed out questionnaires (ranging from 46-54%), and below the minimal acceptable rate for analysis except in a supportive role.

As the response rates for the organizations and individual users were in the acceptable range, the assumption was made that the non-respondents were no different than the respondents and that any generalization to the universe based on these questionnaires' data was relatively valid.

The same assumption was made in regard to individual items on these questionnaires. Any comparative figures for a given item are based upon the total number of valid responses to the respective item.

Notes on Interpreting Data Tables

It has been the policy of the present study to rely for analysis principally on individual user questions, except where other elements such as organizations, journal subscribers, site interviews, panel experts, etc. have importance or unique contributions to make, or to provide data on observed use as contrasted to direct use. In general, the data from the study have been gathered under circumstances of high response rates, although survey results which included considerable non-response were still useful. With substantial non-response, say over twenty to thirty percent, survey data reflecting suggestions or changes in or improvements in ERIC services were useful but were not considered general measures of user satisfaction or expressions of opinion as to the value or importance of ERIC products and services. In this latter category, the *RIE* and *CIJE* subscribers' questionnaires fell below the minimal acceptable response rate and have been used only for supportive purposes. In this case, however, responses to individual questionnaires provided acceptable data for analysis.

It was not prudent to rely on organization means with a sample size of less than five. Similarly, although calculations were made of individual users with a sample size of five or over, such information must always be interpreted with great caution, particularly if discrepancies between two related tables exist. As a rule, only a sample size of ten or more users was accepted without additional validating data.

It is also important to note that in several tables respondents were categorized by primary professional role because some of the responses regarding purposes of use of ERIC materials are undoubtedly generated by demands of these individuals' secondary or tertiary professional function (e.g., many teachers are also students for all or part of the year). This seems particularly evident in the cases of administrators, teachers, and graduate students, for example, where considerable overlapping within the categories and over professional roles is to be suspected.

Areas Outside Scope of Study

Some disclaimers are in order to identify products and services as well as types of data that were considered outside the scope of the present study. At the request of the Office of Education, the study questionnaire on evaluation of ERIC Tape Data Bases was not used because of overlap with a separate OE investigation. Similarly, the study team was asked to circumscribe its coverage of information analysis products. It was agreed that the present study would evaluate input to *RIE* and *CIJE* from the user's point of view with emphasis on value to the user. In contrast, OE undertook a separate evaluation of the information analysis program of the National Center for Educational Communication (NCEC) which was designed to be a more subject-oriented, scholarly evaluation with the emphasis on the criteria for input and actual quality of the information analysis products.

This study has produced widespread evidence of non-use of particular products and services which, together with data from open-ended questions, site interviews, and panel members, suggests lack of awareness as the principal reason for non-use. Other possible reasons for non-use were also proposed such as delays and costs of document delivery, non-acceptance of microfiche, lack of targeted materials, research vs. practitioner orientation, etc. To what extent these and other cited reasons play a role in the findings of this study cannot be determined precisely and conclusively from these data.

Interviews were used, to a limited extent, as a follow-up of the mail questionnaires including a small percentage of those persons and organizations who failed to respond to the questionnaires. These data were integrated in the analysis, but there is a need to gather more comprehensive data from non-users in order to learn more about resistances and blocks to use of ERIC products and services. Information should be gathered on alternative information sources used and other reasons for non-use such as anti-research attitudes, reluctance to use report literature, non-acceptance of microfiche, etc. Accordingly, a principal recommendation of this present study is the need for developing more extensive and in depth information on non-users of the ERIC system, i.e., why potential users are not using ERIC products and services.

Estimates of the Full Universe of ERIC Users

The extent of use of ERIC products and services by the total universe of users in all educational areas and under all circumstances cannot be estimated with any precision using the data of the present evaluation study. Classical methods, which assume random sampling, are not theoretically correct for the projection to a full universe of users when the data come from combinations of samples as in this study. Although the survey instruments employed by this study comprehensively solicited response from the principal educational communities, the study team is convinced the field is so vast and diverse that only gross estimates of ERIC users can be extrapolated to an unmeasured total universe of educators.

Proceeding with this note of caution, the study team developed a series of summary tables (1.1 through 1.7) which estimate the total number of users of ERIC products and services, broken down by organization affiliation, and by educational occupation wherever possible. The resulting estimates must be considered an understatement of ERIC usage because they are derived from data adequate for evaluation but not for a census of users. The data for all estimates were derived from responses to the organization questionnaire described above, and represented estimates of observed use by library and information center staff.

Table 1.1 provides an estimate of 194,229 users served per week, with undergraduate and graduate students accounting for 120,705 or 62% of this total and teachers 41,175 or 21%. Administrators were the third most numerous group at 21,142 or 11%.

As noted earlier, there is evidence many teachers were using ERIC materials in a student capacity. These data were brought out by respondents to the Individual User questionnaire (see above summary of methodology) in which the secondary professional roles of ERIC users were identified (Table 3H, Vol. I).

Privately supported standing order institutions, of which 80% were colleges and universities, recorded the largest number of users (126,984 or 65% per week) among organizations (Table 1.2). Education information centers with 33,790 or 17% and State Departments of Education with 14,238 or 7% were the next most used service centers.

Estimates of the total number of users of ERIC publications are:

Product	Estimated Total Number of Users Per Week
RIE	190,590
CIJE	138,330
Microfiche	178,190
Hard Copy	135,260

TABLE 1.1

ESTIMATED TOTAL NUMBER OF USERS SERVED PER WEEK BY OCCUPATION

	Estimated No. of Users Per Week	%
Teacher	41,175	21.2
Administrator	21,142	10.9
Graduate Student	43,120	22.3
Undergraduate Student	77,585	39.8
Researcher	5,952	3.1
Librarian	5,255	2.7
Total	194,229	100.0

Source: Organization Questionnaire

*N = 246 organizations responding (Table A1A.2 in Vol. 3)

TABLE 1.2

ESTIMATED TOTAL NUMBER OF USERS PER WEEK BY ORGANIZATION

	No. of Organizations Responding	No. of Users Per Week	%
*Clearinghouses	14	855	0.4
Education Information Centers	22	33,790	17.3
*USOE Regional Offices	7	774	0.3
State Departments of Education	35	14,238	7.3
Reading Resources Network Centers	27	12,441	6.4
*Regional Educational Laboratories	10	638	0.3
Standing Orders (Privately Supported)	31	126,984	65.3
EDRS Individual Orders	100	5,283	2.7
	246	194,229	100.0

Source: Organization Questionnaire

*Included in sample of USOE-supported standing orders (Table A1A.1 in Vol. 3)

TABLE 1.3

MEAN NUMBER AND TYPE OF SPECIALISTS SERVED/WEEK IN EACH ORGANIZATION

	1	2	3	4	5	6	7	8	9*
Teacher	12	194	8	65	77	10	43	115	524
Administrator	8	74	22	30	77	8	28	31	278
Graduate Student	9	9	12	28	130	10	121	24	343
Undergraduate	4	16	22	107	73	7	218	344	791
Researcher	5	3	17	14	9	20	12	66	146
Librarian	7	14	5	20	11	3	7	7	74
Average total No. Served/week in each organization	45	310	86	264	377	58	429	587	2156

*1. Clearinghouses (14)
2. Information Centers (22)
3. Regional Offices (7)
4. State Departments of Education (35)
5. Reading Resources Network Centers (33)
6. Regional Educational Laboratories (10)
7. Standing Orders (Privately supported) (31)
8. EDRS Individual Orders (100)
9. Average Number Served

Source: Organization Questionnaire

Table
1.4

MEAN NUMBER OF USERS OF ERIC PUBLICATIONS PER WEEK BY PRIMARY ASSOCIATION

Primary Association	RIE	CIJE	MICROFICHE	HARD COPY	
Pre-School	--	--	--	--	*
Elementary School	8	--	--	--	*
Secondary School	3	8	6	16	
College or University	17	16	17	11	
State Dept. of Education	12	9	12	5	
Regional Ed. Laboratory	11	8	11	9	
R & D Center	18	6	22	8	
Professional Organization	9	10	4	3	
Office of Ed. Reg. Office	7	3	6	10	
Other Federal Agency	10	10	12	6	
Local/Reg. Info. Center	14	8	14	11	
Business or Industry	5	5	3	3	
Other	10	7	9	6	
Overall	124	90	116	88	

Source: Organization Questionnaire
* Where N < 5, calculations have been omitted

Table
1.5

MEAN FREQUENCY OF USAGE OF ERIC PUBLICATIONS FOR 1970 BY OCCUPATION PER INDIVIDUAL USER

Occupation	RIE	CIJE	MICROFICHE	HARD COPY
Administration	4.91	2.56	10.50	2.79
Teaching	4.14	2.78	8.08	1.92
Pupil Pers. Serv.	--	--	--	-- *
R & D	5.44	2.88	12.33	3.54
Library	6.16	3.95	8.71	1.75
Consulting	4.66	1.18	12.42	2.42
Undergraduate	2.50	< 1.00	2.50	< 1.00
Graduate	4.44	3.00	7.23	< 1.00
Other	4.19	< 1.00	10.00	< 1.00
Overall	4.67	2.71	8.56	1.17

Source: Organization Questionnaire
* Where N < 5, calculations have been omitted

Table 1.6

ESTIMATED MEAN USAGE PER INDIVIDUAL OF SPECIAL DOCUMENT COLLECTIONS DURING 1970 BY OCCUPATION

Occupation	Pacesetters in Innovation	Catalog of Selected Doc. on the Disadvantaged	Catalog of Selected Doc. in Higher Educ.	Manpower Research Inventory	Research Reports
Administration	5.19	5.54	3.64	4.21	6.45
Teaching	3.59	3.87	5.40	4.09	4.91
Pupil Pers. Service	N<5	N<5	N<5	N<5	N<5*
R & D	6.39	5.44	5.61	5.50	7.03
Library	7.07	7.47	7.24	5.60	6.00
Consulting	3.45	8.89	5.78	6.22	6.60
Undergraduate	4.93	4.71	5.00	5.22	4.71
Graduate	7.14	6.09	7.07	7.07	4.85
Other	5.94	1.88	4.69	3.53	6.24
Overall	5.85	5.53	5.99	5.53	5.60

Source: Individual User Questionnaire
*Where N<5, calculations have been omitted

Table 1.7

ESTIMATED MEAN USAGE PER INDIVIDUAL OF SPECIAL DOCUMENTS DURING 1970 BY PRIMARY ASSOCIATION

Primary Association	Pacesetters in Innovation	Catalog of Selected Doc. on the Disadvantaged	Catalog of Selected Doc. in Higher Educ.	Manpower Research Inventory	Research Reports
Pre-School	10.20	16.50	N<5	N<5	3.33*
Elementary School	3.59	3.50	3.67	2.86	4.32
Secondary School	8.30	4.67	9.41	8.35	8.83
College or University	6.04	5.20	6.20	6.01	5.26
State Dept. of Education	6.33	5.00	7.10	7.40	5.44
Regional Ed. Laboratory	4.32	6.67	4.60	3.63	4.86
R & D Center	7.00	7.40	5.73	5.73	6.27
Professional Organization	N<5	N<5	N<5	N<5	N<5*
OE Regional Office	N<5	N<5	N<5	N<5	N<5*
Other Federal Agency	3.80	2.33	2.33	2.20	2.33
Local/Regional Info. Center	N<5	N<5	N<5	N<5	N<5*
Business or Industry	N<5	N<5	N<5	N<5	N<5*
Other	6.91	5.03	5.88	6.40	7.73
Overall	5.95	5.28	6.07	5.73	5.64

Source: Individual User Questionnaire
*Where N<5. calculations have been omitted

VOLUME I - Chapter 2

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Chapter 2

SUMMARY OF FINDINGS (PART I)
AND RECOMMENDATIONS (PART II)

Introduction

This survey project is the first sytematic effort to evaluate how well ERIC has provided needed information about educational developments, research findings, and exemplary educational programs and practices across the nation. It was intended that this study project would provide the Office of Education with management information on which to (1) evaluate the extent to which ERIC has evolved toward meeting its goal of guaranteeing ready access to the nation's current, significant literature in the field of education; (2) identify areas where this goal has not been fully achieved; and (3) plan and initiate corrective action.

The Summary of Findings comprising Part I of this Chapter has been prepared to reflect the highlights and the most significant inferences to be derived from this study. The findings presented here in summary form are designed to call attention--based on analysis of data in the body of the report--to conditions, trends, and issues concerning use and user reactions to ERIC products and services. They attempt to provide a concise, analytical basis on which to evaluate the extent to which ERIC has met its goals, and, where its goals have not been fully met, to identify deficiencies and weaknesses. In general, the assignment and sequence of the subject arrangement of the summary findings correspond to chapters in the body of the report.

In order to permit ease of reference from the summary findings to the specific data (and analysis) upon which they are based, each topical group of findings is keyed to the supporting chapter and data source(s). All questionnaires cited are reproduced in full in Chapter 2 of Volume III of this report. Additionally, all descriptive and record data utilized for analysis and fully identified in Chapter 1 of the same volume.

The recommendations presented in Part II of this Chapter propose needed improvements and courses of action to correct deficiencies identified by this study. A brief discussion accompanies each recommendation to relate it to the framework of basic findings developed in the survey and to indicate specific implications or applications. Subsequent chapters (3-8) offer detailed background and supporting data (acquired principally from November 1970 to September 1971). It was inevitable, of course, that this study would be overtaken by continuing changes in ERIC products and services, rendering some recommendations inappropriate and anticipating others.

The recommendations recognize and reflect the extraordinary diversity of the educational community's information requirements and the efforts of the ERIC system to build a document-information network as a basis for development of new communication programs of the National Center for Educational Communication (NCEC). These recommendations deal for the most part with the management, performance, and economics of the principal functions of the ERIC system as reflected in its products and services.

When effectiveness of a document-information system is measured by satisfaction of the user's requirements, there is always uncertainty as to whether the fault lies with the system or with the user. A basic assumption underlying the recommendations of this study has been that the system must respond to the user's requirements, even though poorly articulated.

Although a number of recommendations propose further study and research, it should be understood that this evaluation study, because of its range and scope, has of necessity been cast in the role of an overview. Because the field of document-information transfer in educational areas is so broad and complex--and primitive--much investigation remains to be done before a national document-information system can make its full contribution to educational communication. Accordingly, almost every page of data and analysis of this report contains implicit questions requiring further study.

Two chapters in Volume III also provide recommendations of experts on the advisory panels and anecdotal information obtained from open-ended questions addressed to individual users of ERIC products and services. Chapter 3 includes the "Summary of Conclusions of ERIC Study Advisory Panels;" and Chapter 4 reports fully on "Anecdotal Information."

PART I

SUMMARY OF FINDINGS*

GENERAL**

The principal indicators of increased use and user satisfaction with ERIC products and services were all positive. Whether measured quantitatively by the remarkable growth and increased use of ERIC publications, or qualitatively by the stress of synthesis and evaluation and by emphasis on the dissemination of information as well as document delivery, ERIC has come a long way toward achieving its overall goal of providing local access to needed information that can be used in developing more effective educational programs.

Users judged the ERIC system as a whole very favorably. Two-thirds considered the system very useful. Next to professionals in libraries, *teachers, research personnel and administrators* among occupational groups *ranked the ERIC system highest in value.*

Nine of every ten individual users reported that they *obtained information through the ERIC system which they probably would not have found otherwise.* For most of these users, the frequency of this experience varied between one and ten times.

Seven out of ten users reported information obtained from the ERIC system resulted in improvements in the way they do things.

More than one-half of the individual users reported that ERIC had helped them avoid duplication.

The *main purposes for which ERIC publications were used* included: *keeping abreast in a field, research projects, program improvement, assignments and term papers*, and *curriculum development.*

Requests for *clearinghouse user services increased by three-fourths* between 1969-71. The *educational practitioner accounted for the greatest increase* in number of requests. Among groups requesting information, roughly three-fourths of the requests came from educational practitioners (45%), educational decision-makers (14%), and information specialists (13%).

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**Data sources: Individual User and Organization questionnaires; Clearinghouse Quarterly Reports

ERIC's growing *involvement with professional organizations has been productive in intellectual bridge-building.* In the period covered by this study the following results were observed: 700% increase in meeting participation, 600% increase in joint publication, and 300% increase in other affiliations.

Although *research and publication* variables revealed *different evaluation of particular ERIC products and services, no such differences* were apparent *with respect to the overall evaluation of the ERIC system.*

CHARACTERISTICS OF ERIC USERS*

Approximately *one-half of ERIC users were associated with colleges and universities; one-fourth were local school personnel.*

Graduate students and teachers were the *most numerous users* of ERIC products and services.**

Other *heavy users*, in order, were *librarians, school administrators*, and *research and development personnel.*

The typical ERIC user is a female graduate student or teacher about thirty years old with a master's degree. She likely has conducted research but has not yet published professionally.

ERIC Users Classified by Academic Degree:

- Nine of ten held an academic degree
- Five of ten held a master's degree
- Three of ten held only a bachelor's degree
- One of ten held a doctorate degree

ERIC Users Classified by Age and Sex:

- More than one-half are 35 or below, with one-third in the 26-35 age range.
- Slightly more than one-half of users were female.

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*Data source: Individual User questionnaire.

**Based on sample of 465 respondents.

No professional interest group in the educational community dominates the use of the ERIC system; their primary interests are scattered across principal educational classifications.

Reported Channels for Obtaining Information (in descending order of importance)

- Journal articles
- Oral communication
- Abstracting and indexing services
- Books and Monographs

Reports ranked seventh among eight most important *channels of communication* cited by ERIC users.

Communication among Educators

- One-half of ERIC users were contacted an average of two or more times per month by other educators seeking information related to their current work.
- As degree level increased the average number of contacts per month also tended to increase; older persons tended to have a greated number of professional contacts than younger persons; and males reported a greater number of contacts than did females.

Publication Record of ERIC Users

Two-thirds of ERIC users have not published books or papers within the last five years.

Ten percent of ERIC users have 2 - 5 *publications* within the last five years.

Research Affiliation

One-half of ERIC users had engaged in research during the last five years.

Three-fourths of users with a doctorate reported *affiliation with research* in the last five years.

More than half of school administrators and teachers reported some *research affiliation* in the last five years.

Outside Responsibilities of ERIC Users

About one-third of ERIC users have *outside professional responsibilities* which include *consulting, participation in meetings, responsibilities in professional associations*, etc.

DOCUMENTS ACQUISITION*

There has been substantial and continuing growth in ERIC's total collection of screened documents, reaching about 100,000 in 1971.

Document selection criteria developed by ERIC clearinghouses reveal a *high degree of uniformity* in terms of specifying the *quality and usefulness of documents to be acquired.*

In contrast, *ERIC users* reflected the *full scale of approval to dissent over selection policies*, some preferring a *highly screened collection of top quality documents*, and *others favoring application only of gross negative selection criteria.*

A *limiting growth factor of* about *1,000 documents per month*, or an average of *50 documents input per clearinghouse*, operated to *artificially influence the application of selection criteria.*

During 1970-71 a trend developed toward more solicited than unsolicited documents.

The number of *documents processed for local files declined in the past two years because OE discouraged the maintenance of large local files.*

Many *ERIC users* expressed the *need for a wider range of resource materials than non-published research documents.*

MICROFICHE**

Microfiche Copies of ERIC Reports

Copies of most ERIC reports announced in *Research in Education* (RIE) are *available in microfiche form at low cost* to institutional subscribers of monthly standing orders--less than 10¢ for each microfiche or about $120.00 per month.

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*Data sources: Clearinghouse Quarterly Reports; site interviews; Advisory Panels.

**Data sources: EDRS sales and distribution records; Individual User and Organization questionnaires.

The *number of organizations purchasing all microfiche increased to a total of 417 in 1971 up one-third* over the previous year and 30% *over the past three years.*

The *number of ERIC reports sold in microfiche form* (by titles) *exceeded six million* in each of the past two years.

Higher education accounted for the almost *three-fourths of standing orders for microfiche in 1971.*

Although *local schools increased their microfiche collections* in absolute numbers, their *proportion of orders declined from 14% to 5%* in the past three years; similarly, *State agencies increased* their number of *collections three-fold,* but barely maintained their *proportion of orders at 8%.* (This was accounted for by an accelerated expansion in the number of institutions of higher education acquiring collections.)

Individual purchases of ERIC microfiche grew by 50% in 1970 over the previous year.

Frequency of Microfiche Use

Microfiche were heavily used with *four out of five ERIC users* reporting *use of microfiche at least 1-10 times a year and one-half* using *more than 11 microfiche titles* during the year.

The *most frequent use of microfiche* was by *research and development personnel,* followed closely by *administrators and teachers*--85% of whom reported use of microfiche 1-10 times a year or more.

Graduate and undergraduate students also reported very *substantial use of microfiche.*

The number of people who are estimated to *use microfiche each week at colleges and universities is far greater* than that in any other organization.

Purposes for Using Microfiche

Overall the most often cited *purposes for using microfiche* were for *research projects, assignments and term papers,* and *keeping abreast in a field.*

Report and article preparation, curriculum development, and *program improvement* were also *frequent purposes for use of microfiche.*

Relative Usefulness of Microfiche

Of those who have used microfiche, *less than one percent* found it of *little value.*

Across all categories of respondents, only *one in eight have never used microfiche.*

Among ERIC users, three-fourths found the microfiche capability very useful.

Administrators, teachers, and graduate students were next to research and development personnel in expressing *strong approval of the usefulness of microfiche.*

Availability of Microfiche Equipment

Those *organizations having the most equipment* available have the *heaviest microfiche usage,* i.e., *universities and R & D centers.*

State departments of education and local and regional information centers also reported a *high amount of equipment.*

Although secondary schools recorded the lowest relative amount of equipment, *school personnel reported 88% had accessibility to microfiche readers.* Further, of those lacking such accessibility, *90% reported they would use readers if available.*

Overall three-fourths of ERIC users reported a microfiche reader easily accessible.

A consistent theme of comment by users and operators of ERIC information services was the need for *more, better, and less expensive microfiche readers and reader-printers.*

HARD COPY (FULL SIZE) DOCUMENTS*

Orders for hard copy documents increased one-third in 1970 over 1969, to a total of about 60,000 copies. (Compared with 6,200,000 microfiche copies).

Local schools reported using hard copy less frequently than microfiche by a factor of 50%.

More frequent users of hard copy were *State Departments of Education* and *Regional Educational Laboratories.*

About half of ERIC users use hard copy whereas over 80% use microfiche.

Comparison of frequency of use data between microfiche and hard copy should take into account the large files of standing order microfiche available to users in a majority of the centers studied, as contrasted to a typically smaller number of hard copy documents purchased individually by centers at much greater expense per copy.

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*Data sources: Individual User and Organization questionnaires; EDRS sales and distribution records.

THESAURUS OF ERIC DESCRIPTORS*

The *most frequent users* of the *Thesaurus* are, in order, *librarians*, *research and development personnel*, *teachers*, *graduate students*, and *administrators*.

Overall *less than one-third* of ERIC users indicate they have *never used* the *Thesaurus*.

Only *one out of eight* respondents indicate they *first go to the Thesaurus* in conjunction with use of *RIE* and *CIJE*.

There are only *minor differences* among users of *CIJE* and *RIE in terms of initial utilization of the Thesaurus*.

Both organizations and individual users of the ERIC Thesaurus found it "useful" or "very useful" by a large majority.

Those involved with *research activities found the Thesaurus more useful* than those not so involved.

Those who found the *Thesaurus most useful* were *graduate students*, *librarians* and *research center personnel*. This suggests that the *Thesaurus* is found *very useful by those who are continually involved with library search and accustomed to the technique of information search*.

About *one-half of teachers and administrators found the Thesaurus "useful" or "very useful."*

Overall about *90% of both individual users and organizations agree that the Thesaurus descriptors are representative of currently used language*.

There is also *overwhelming evidence* that *users found* the descriptors to have the *appropriate degree of specificity*.

Data gathered from individual user responses, site interviews, and advisory panels suggested the following changes or improvements in the *Thesaurus* should be considered:

- terms should be geared to practitioners or researchers, not to both.
- more consistent policy in assigning descriptors.
- documents should be identified by type.
- people need to be trained in use of *Thesaurus*.
- program training manual is needed.
- new terminology should be added promptly.
- outdated terms should be deleted.
- categories have too many descriptors, topics too few.

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*Data sources: Individual User and Organization questionnaires

- terms have tended to become too specific--applying to a particular (clearinghouse) discipline
- documents lag behind term changes
- more scope notes are needed
- an identifier index is needed

*RESEARCH IN EDUCATION (RIE)**

The favorable judgment of RIE by ERIC users was nearly unanimous across educational occupations and associations. It was not affected by differences between researchers and non-researchers, or by differences among those who published and those who did not. In summary, *four of every five users of RIE were very satisfied* with it with only *one-half of one percent passing a "no use" judg*

Subscriptions to *RIE* leveled off after reaching a peak in 1968 of 4,400 subscribers, as compared to 4,200 in 1971. (This is not surprising in view of the preponderance of institutional subscriptions, some for multiple copies.)

Institutions of higher education account for *38% of the subscribers; state and local educational agencies* have *27%; foreign subscribers* are the *third largest group comprising 13%.*

Individual subscriptions to RIE have declined, both in terms of absolute numbers as well as percentage (from 13% to 4%). (This phenomenon has become common among abstract journals in recent years.)

Data gathered by this study suggest that *users of RIE tend to be habitual. The majority have used it six times or more per year.*

Occupational categories reporting *most frequent use of RIE* included *research and development* and the *library. Local school administrators and teachers were ranked next highest in frequency of use.*

The *most frequent users of RIE according to professional role* were found among *Regional Educational Laboratories, State departments of education, colleges and universities, and research and development centers* in that order.

Across occupational groups the reasons for using *RIE* were:

- *administrators*: keeping abreast in a field, research projects, program improvement, curriculum development.
- *teachers*: research projects, assignments and term papers, reports, keeping abreast in a field.

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*Data sources: GPO subscription records; Individual User, Organization, Professional Journal and *RIE* questionnaires; Advisory Panels; site interviews.

- *researchers*: research projects, curriculum development, keeping abreast in a field.

- *graduate and undergraduate students*: assignments and term papers, research projects.

Overall *two-thirds of users consult RIE primarily to locate a document which contains specific information.* Less than *one user in five read or scanned each issue solely for current awareness. Teachers* depend heavily, and *administrators* to a somewhat lesser extent, upon *RIE for searching past issues to locate specific information.*

Subscribers to professional educational journals containing ERIC columns reported overwhelming success in finding information being looked for in RIE.

Data gathered from individual users' responses, site interviews, and advisory panels suggested the following changes or improvements in RIE should be studied.

- *flagging non-microfiche.*
- *providing running heads at top of each index page.*
- *merging institutional entries without regard to subdivision.*
- *coding level* (age, elementary, high school, etc.)
- *coding type* (speech, survey, report, etc.)
- *returning to color coded sections.*
- *omitting or flagging non-available documents.*
- *indexing consistency as between general or specific.*
- *correcting unevenness in quality of documents*
- *providing material on "hot topics" often not available*
- *re-naming RIE to Resources in Education*

Data collected on *frequency of use and respondent satisfaction with annual RIE indexes show comparable patterns of usage to RIE itself*

Four out of five users indicated a *high degree of satisfaction with the annual indexes.*

In judging types of *information considered essential for purposes of searching and identification of relevant documents in RIE, two-thirds of individual users voted for abstracts as first priority,* with *descriptors* and *kinds of documents considered next most important.*

Two-thirds of individual users chose *designation by a symbol* as the *best way to handle unavailable documents covered by RIE.*

Four of every five users of RIE (compared to three of five CIJE users) reported *success in finding sought after information.*

More than *three of every four local school teachers and administrators* using ERIC materials considered *RIE very useful.*

RIE was evaluated *high* on *range of topics, contents of resumes,* and the *indexing system,* but relatively *low in other characteristics* including *quality of material selected* and *timeliness.*

CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)*

Subscriptions to CIJE have leveled off and in fact declined slightly from a peak reached in December 1969. As in the case of RIE, the *largest number of subscribers to CIJE is found among institutions of higher learning.* The *second highest group* is formed by *local school districts.* These two groups account for over 70% of all subscribers. Particularily noteworthy is the virtual *absence of individual subscriptions,* somewhat fewer than RIE. This may be due in part to the price of CIJE.

Across all educational occupations individuals reported a moderate absence of CIJE use with more than *one-third of respondents indicating "never used".* The *exceptions are library workers and graduate students,* but even among them about one out of four never used CIJE.

Highest frequency of usage among individual users was reported by *librarians* and *graduate students.*

Researchers and those who had published showed a comparatively higher frequency of use.

Undergraduates rarely use CIJE or are unaware of its existence.

With the exception of administrators, *use of CIJE for assignments and term papers was dominant. Administrators* reported *"keeping abreast"* and *"curriculum development" are the most impelling motives for using CIJE.*

Two of every three users of CIJE search the index for specific information. One out of seven reads or scans for current awareness. (Percentages are roughly the same as reported by RIE users).

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*Data sources: CIJE subscriber records; Individual User, Organization, and CIJE questionnaires; Advisory Panels.

Users rated CIJE somewhat lower as to satisfaction than they did RIE.

Overall *three of every five users of CIJE voted the index as highly useful;* only *one in four actual users rated CIJE relatively low.*

CIJE compared favorably with other educational indexes in *measures of usefulness. CIJE* ranked either "equally useful" (41%) or "more useful" (48%).

Elementary and *secondary teachers* ranked *CIJE higher in usefulness* than did other occupational groups.

Among *CIJE institutional subscribers,* more than *three-fourths reported heavy use* (six times or more per year) across all occupational groups.

The *large majority* of *CIJE* users *go first to its subject index.* Only 7% reported they initially consult the ERIC *Thesaurus* in conjunction with *CIJE* use.

Individual users reported *main purposes for use of CIJE* were *assignments and term papers* and *research projects; subscribers* ranked *main purposes for use of CIJE as follows: keeping abreast in a field, research projects, preparation of papers,* and *assignments and term papers.*

Use of *CIJE* for *curriculum development* and *program improvement* was *relatively low.*

Three of every five users of *CIJE* (compared to four of five *RIE* users) *reported success in finding sought after information.*

More than *four out of five users* approved the *coverage of journals* and *selection of journals*

Channels of communication were ranked according to their *importance* by *CIJE* subscribers: *journal articles, abstracting and indexing services,* and *books and monographs. Reports received few first-place votes,* but *ranked equally* with *journal articles* and *other media as third* most important channel.

Two of every five CIJE subscribers had *undertaken research; one-third published papers.*

Journals indexed in CIJE are almost all *available in a nearby library.*

SPECIAL COLLECTIONS*

In general the special ERIC collections are characterized by lack of use with more than two-thirds of ERIC users reporting "never used" or failing to respond. (Current low use may be accounted for by the age of the collections, i.e., all are 1969 or older.) *No differences appear with respect to either the research or the publication variables.*

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*Data sources: EDRS sales and distribution records, Individual User and Organization questionnaires.

Pacesetters in Innovation

Overall two of every five respondents have never used Pacesetters in Innovation, and not including a 27% non-response rate. Administrators and teachers ranked highest among those who had never used this collection.

Fewer than one in five users rated Pacesetters more than moderately useful

Catalog of Selected Documents on the Disadvantaged.

40% of the respondents never used the Catalog of Selected Documents on the Disadvantaged. Of those who did use the Catalog, about one-half restricted its usage to less than six times a year.

Librarians, consultants, and graduate students seemed to favor the Catalog more than other groups.

Selected Documents in Higher Education

Overall use frequency of Selected Documents in Higher Education shows an even lower rate (28%) than for other special collections. This is accounted for in part by its unavailability for purchase. ERIC product users in all occupational categories indicated rather uniformly a low usage frequency for the Selected Documents. Those who did use the Documents, however, had relatively high and frequent need for it.

The Selected Documents were of relatively little use to organizations as compared with usage by individuals.

Manpower Research Inventory

The Manpower Research Inventory was used relatively lightly with a high rate of non-users (46%) and not including a non-response rate of 29%. Findings pointed to a rather specialized group of users across occupations of the Inventory documents. Those who had not published used the index much less frequently than those who had.

Roughly two out of five people who actually used the Inventory gave it a high rating of usefulness, including those in administration, teaching, research, and graduate study categories.

Office of Education Research Reports

The Office of Education Research Reports was used relatively frequently by contrast with the other special collections. About 35% of respondents reported using the Reports. The heaviest user categories included research libraries, consultants, teachers, and administrators, all of whom reported use of 1 - 5 times per year or more.

Researchers used the Reports more often than did non-researchers; an identical difference existed between those who had published and those who had not. Administrators and teachers tended to use the Reports less frequently than those in research and in libraries.

Similarily, a *greater degree of satisfaction* was reflected by *researchers and those who published.*

Of people in those *groups who used the* *Reports*, *administrators gave few high ratings* compared with respondents in *teaching, research, libraries, and graduate studies.*

COMPARISONS OF INDEXING JOURNALS*

Availability of Index Journals

Over half of libraries and information centers providing ERIC products and services subscribe to all three of the major indexing journals in education: *Education Index*, *Research in Education* (*RIE*), and *Current Index to Journals in Education* (*CIJE*)

Education Index is the journal most available in libraries to ERIC users, closely followed by *RIE* with *CIJE* a distant third.

Education Index ranks highest in availability among teachers and administrators.

Choice of Index Journals When More Than One is Available**

The high non-response rate (51%) among subscribers to professional educational journals indicated probable unfamiliarity with one or more of the three indexing journals cited.

Education Index was the preferred choice among subscribers to professional education journals, closely followed by *RIE*, with *CIJE* registering less than one-third the popularity of either of the other two journals.

Approximately one-half of teachers among journal subscribers used *Education Index* as against 39% for *RIE* and 11% for *CIJE*.

Administrators among educational journal subscribers reported *Education Index* and *RIE* were used equally with *CIJE* recording about one-half of their levels of use.

Frequency of Use

Among individual users of ERIC products and services, *RIE* ranked first with 72% recording some use of *RIE*.

Education Index was next most used by 68%, and *CIJE* followed with 54% indicating use of this journal.

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*Data sources: Individual User, Professional Journal, *CIJE*, and *RIE* questionnaire

**Data source: Professional Journal questionnaire.

Dissertation Abstracts (50%) and *Psychological Abstracts* (38%) recorded surprisingly high levels of use by educators, while *Educational Administration Abstracts* and *Child Development Abstracts and Bibliography* were each used by only 18%.

Comparative Usefulness of CIJE*

CIJE was compared to other educational indexing journals covering the periodical literature with the result that 92% of respondents rated *CIJE* equally useful (53%) or more useful (39%) than other indexing journals. Only 8% considered *CIJE* less useful as compared to other journals indexing the periodical literature.

Ways in Which Indexing Journals were Used During the Past Year.

Two-thirds of individual users reported that they used *RIE primarily to search past issues to locate specific information. Graduate students, teachers, and administrators* all reported frequent use of RIE for *searching*. *RIE ranked first in use for current awareness* although less than one-fifth reported *reading or scanning the journal for this purpose*.

Less than 10% reported using *RIE* for both purposes.

Almost *two-thirds of individual respondents* reported using *CIJE primarily to search for specific information*.

Approximately two-thirds of users indicated that *Dissertation Abstracts* was used primarily to search for specific information, with indications of uniformly heavy use by *librarians, teachers, administrators, and graduate students*.

Among the seven indexing journals examined, *Education Index* recorded the highest percentage of users searching for specific information. (Seventy per cent, as against 67% for *RIE* and 62% for *CIJE*.)

Educational Administration Abstracts was little used by ERIC respondents (corresponding closely with *Child Development Abstracts and Bibliography*) with school administrators indicating greater use of this indexing journal than other occupational categories; but even so, 43% reported never using *Educational Administration Abstracts*.

Psychological Abstracts ranked fifth among the seven indexing journals in use by ERIC respondents, with 53% indicating primary use for the purpose of retrospective searching.

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*Data source: Individual User questionnaire, in which only actual users of *CIJE* were asked to respond.

INFORMATION ANALYSIS PRODUCTS*

Reviews and bibliographies are *cited in* RIE and *reach users in a variety of ways:* direct from *clearinghouses*, through *Educational Documents Reproduction Service (EDRS)* and from *professional organizations.*

Newsletters sometimes *include information analysis material*, and an *annual bibliography of these publications* provides a *comprehensive listing.* The *variety of outlets* impress many users as both a *strength* and a *weakness* of the system.

Substantial growth in all information analysis products occurred over the three-year period, 1967-70.

A *substantial portion* of the ERIC system's users *do not utilize information analysis products* to any great extent. Overall, almost *one-half of users* reported either "*no use*" *or* "*never used.*" The *relative lack of use* of information analysis products was attributed by many non-users to *widespread lack of awareness of the existence* of potentially useful summary publication.

Administrators make the most use of all types of *summarized and interpreted information. Consultants* and *teachers rank next* in the use of *interpretative summaries.*

Actual users of information analysis products reported a *high rate of use.* Those involved with *research and publication* generally used *information analysis products more.*

Only *one in four of organizations providing service* to users found information analysis products "*very useful.*"

Variation in quality and *excessive use of research terminology* were seen as *obstacles to use* of information analysis products.

Educators involved in information dissemination expressed a desire for *more interpretative materials including state-of-knowledge reviews. Summaries of* "*hot*" *topics* and *related bibliographies* were also *favored.*

DISSEMINATION CHANNELS**

ERIC's development has been characterized by a continuing, vigorous effort *to help strengthen existing communication channels* among educators and educational organization.

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*Data sources: Individual User and Organization questionnaires; Clearinghouse Quarterly Reports; Advisory Panels; site interviews.

**Data sources: Individual User, Organization, Professional Journal and Newsletter questionnaires; Clearinghouse Quarterly Reports; Advisory Panels; site interviews.

Earlier emphasis on *basic dissemination media* such as clearinghouse newsletters, columns in professional journals, and audio-visual materials appears to have shifted in the past year to non-document efforts such as education improvement centers and state dissemination teams. Continued increases in numbers of flyers and brochures are exceptions.

As ERIC has matured its *emphasis has begun to shift increasingly to analysis and interpretation of information for target audiences;* to increased relationships with professional organizations including panels, conferences, displays, etc.; to training State dissemination teams, under an NCEC program, in their efforts to assist educators in problem formulation and retrieval of relevant information.

Most users first learned of ERIC through classroom instruction or colleagues, not through ERIC dissemination products.

ERIC columns in professional journals have a potential of reaching over one million educators comprising target audiences defined by various professional organizations. More than one-half of journal subscribers, however, did not read ERIC columns or were not aware of their existence.

All but one clearinghouse issue a newsletter. Typically they provide information on significant new ERIC research materials to key staff of agencies and organizations that they would otherwise have missed.

Teachers and graduate students are among important segments of the community of potential ERIC-users that do not receive or read *ERIC newsletters.*

A *brochure* is one of the most effective ways to promote ERIC among State and local agencies and information centers.

The total number of *brochures* produced by clearinghouses on specific aspects of ERIC's offerings *continues to increase.*

Clearinghouses increasingly are involved in a variety of *cooperative efforts with the professional associations* in their respective areas.

In addition to providing bibliographic services, participating in meetings, joining in publication arrangements, etc., *ERIC clearinghouses have strengthened the dissemination programs of professional organizations* themselves and have brought about wider acceptance and use of unpublished research materials.

PART II

RECOMMENDATIONS

General

1. In order to insure that ERIC products and services remain responsive to users' needs, a program for continuous measurement of use and user reaction should be implemented.

A one-time evaluation can only measure the performance of an information system at a particular point in time. As changes are made to a system, particularly to a dynamic information system such as ERIC, it would be desirable to estimate the effects of those changes. It is obvious this evaluation study of ERIC products and services can only provide a broad overview and can not identify all areas of use and user reactions. It can locate the most important sources and areas of greatest weakness, but it cannot hope to identify all specific instances of user satisfaction or dissatisfaction, or for example, all cases of vocabulary inadequacies in the system. To acquire and analyze data that will allow the continuous improvement of ERIC products and services, a long-range monitoring and evaluating program should be developed and implemented by Central ERIC. Additionally, each clearinghouse should carry out its own continuous evaluation effort, essential for the improvement of its separate services and contributing to the overall system measurement.

2. All libraries and information centers maintaining ERIC collections should be encouraged to follow a single, simple record system, cooperatively arrived at, which will accurately reflect use of and user reactions to ERIC products and services.

If properly maintained, such a record system would be of equal value to the centers themselves and to ERIC management. It is traditional that libraries and information centers maintain poor records of use and users of the materials they service. Educational information centers are no exception to this practice. During a preliminary solicitation of data from information centers in the summer of 1970, eleven information centers recommended as active and likely to maintain adequate records on the use of ERIC materials were found, when queried, to be able to furnish very little factual information apart from gross estimates. In point of fact, only two centers were able to provide significant data of value to this study. This was borne out in April 1971, by responses of information centers receiving questionnaires which asked for estimates of numbers of users on an average day. Estimates were frequently grossly overstated.

3. Products and services developed by the ERIC system should be reviewed in the context of the total information resources available to the educational community, including those sponsored or developed by commercial organizations and by professional educational societies.

Such a periodic assessment is necessary in order to identify strengths and weaknesses in educational communication across all categories and in all educational areas. This periodic review, possibly carried out by the clearinghouses and coordinated by Central ERIC, would contribute importantly to shaping future ERIC program development and allocation of resources. Possible duplication of effort as between the ERIC system and commercial publishers and professional societies could be avoided and a basis of public-private cooperation more fully established. In a sense, the clearinghouses in their particular educational areas would take on some of the characteristics and responsibilities of the delegated agent function stressed in the Wineberg Report, i.e., advising on the state of educational communication in their areas.

4. *Studies to determine the half-life for educational literature citations, including both journals and research reports, are needed and should prove useful to ERIC managers in program development.*

It is commonly said in educational areas as well as in many other fields that "anything of significance gets published". This rule of thumb has been examined by other fields and disciplines and found to have varying validity. A similar study needs to be undertaken in educational areas to determine:

1) The relative use of reports as a communication channel.

2) The extent to which reports or their contents appear later (and how much later) as journal articles.

3) The possible application of the referee system, or its equivalent, to the report literature as a means of remedying the defects of "quick and dirty" reporting which is characteristic of many reports.

4) The extent and rate at which reports, not necessarily their contents, become obsolete.

The data produced by this study underline the need for more information on the role and acceptance of the report literature as a principal means of communication among educators.

5. *More information would be useful on non-users of the ERIC system, i.e., why are potential users not using ERIC products and services.*

This study has produced widespread evidence of non-use of particular products and services which together with data from open-ended questions, site interviews, and panel members, suggest lack of awareness as the principal reason for non-use. Other possible reasons for non-use have been proposed such as delays and costs of document delivery, non-acceptance of microfiche, lack of targeted materials, research vs. practitioner orientation, etc. To what extent these and other cited reasons play a role in the findings of this study cannot be determined conclusively from these data. The characteristics of non-users and reasons for non-use need to be identified in a separate focus and examined in depth as a means for determining possible corrective actions.

6. NCEC should urge professional educational societies to use their information and publication programs to familiarize their members with the potential usefulness of the ERIC national information system for providing ready access to results of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

Professional educators in all areas should have an opportunity to become aware of the availability of ERIC products and services as working tools in the communication of new developments and research results throughout the educational community.

7. In order to reduce the overall effort required for document file maintenance, Central ERIC should provide standard guidelines for file maintenance, or perhaps a manual, to assist information managers in reducing time spent on collections as compared with time spent assisting patrons.

Time investment for maintaining and updating ERIC collections is relatively high when compared with the time spent assisting patrons, i.e., 5.6 mean hours per week as against 8.9.

Clearinghouse Responsibilities

8. A basic re-examination should be undertaken of the centralization-decentralization concept under which the several functions and tasks involved in document processing and information availability are assigned to the clearinghouses and to the ERIC Processing and Reference Facility.

The following recommendations for a reallocation of some functions and responsibilities which no longer require specialist clearinghouse support are based on data obtained from individual users and through site visits to clearinghouses and state and local agencies:

1) The indexing and abstracting operation now performed by the clearinghouses on a decentralized basis should be considered for reassignment to the ERIC Facility as a central activity. The apparent unevenness in ERIC indexing is characteristic of most decentralized efforts in indexing and could undoubtedly be improved through a centralized operation, which has many advantages for indexing. This would not eliminate the intellectual input from the clearinghouses from the standpoint of contributing new terms or reshaping language used in the *Thesaurus*. The technician expertise required for effective indexing as a regular function requires consistency across educational areas and training in the professional aspects of indexing itself, which could be performed more efficiently on a central basis. Similarly, descriptive abstracting does not call upon the special knowledge of clearinghouse professionals and can be better performed centrally by individuals trained for this activity.

2) Clearinghouse personnel have the knowledge, skills, and attitudes to increase the availability of information on tested alternatives in educational practices and to develop further ways to help educators apply new knowledge and successful practices in their particular educational areas. In brief, it is recommended that clearinghouse directors be given the additional assignment of serving as part-time dissemination links between the information resources in their particular education areas and the educational practices community at the state and local levels. In concentrating additional efforts upon all means to insure that information becomes applied to improvement of educational programs, professional clearinghouse personnel would have the opportunity to highlight new ideas and explore promising new methods for the transfer of information. Additionally, the clearinghouses, through their dissemination contacts, the provision of reference services, and the preparation of information analysis products need to be given increased responsibility as feedback loops for the system by identifying and inputting users' needs and reactions into the ERIC system.

3) As centers of subject-matter expertise the clearinghouses cooperatively should play an important advisory role in assessing the usefulness and impact of information analysis products developed by the clearinghouses in their separate capacities. This could take the form of a periodic (annual) review of new information analysis products, the impact they have had during the past year, and the directions in which they seem to be going in relation to user needs as reflected by the link between users and the clearinghouses.

9. The reference function performed by the clearinghouses should be re-examined to determine whether it should be continued at the present level, permitted to increase in volume and complexity, or be phased out altogether with a view to augmenting this essential function at regional and local information centers.

Although the numbers and types of requests for clearinghouse user services have increased substantially, it should be pointed out that the ERIC clearinghouses themselves were not designed, nor are they funded, with exception of a small number, to provide extensive reference services on-site.

Document Sales and Distribution

10. A cost-benefit-effectiveness study is needed of the ERIC document sales and distribution activity, including but not limited to EDRS, to determine whether present sales distribution policies and practices are an inhibiting influence to ready access to ERIC documents.

A number of aspects of document sales distribution need to be considered:

1) Methods of payment for orders should include a coupon-deposit system. This would reduce the cost of ordering and distribution and remove a basic irritant to purchasers who at present must send payment, sometimes not readily known, to accompany orders under $10.00.

2) Telephone requests followed by written orders should be accepted under emergency conditions.

3) A twenty-four hour turnaround time on orders for documents on the shelf should be maintained. Interim answers to all requests not so handled should be forwarded within 48 hours. Numerous reports of long delays in handling document orders point to a serious inhibiting influence to repeat orders.

4) Documents announced in *RIE* should be reproduced in anticipated quantities (see No. 5 below) by the time the *RIE* subscriber sends his order.

5) Customer "demand" models should be established for estimating numbers of different types of documents to be ordered, based on prior experience. This would improve order response time and reduce costs for full size copies. The linear regression "demand estimate equation" developed for NTIS is an example.

6) The apparent high cost of hard copy ($3.29 per 100 pages) should also be reviewed in terms of a maximum distribution/minimum cost equation.

The present practice of selling a number of reports and series at GPO' when similar reports are sold through EDRS was reported to be confusing by a number of users. This confusion is compounded when certain titles such as the PREP reports are published at GPO but are not announced in *RIE* or made available through EDRS until three months later. This is difficult to understand, except as a possible GPO requirement, for reports whose currency is a matter of importance.

The concept of "one-stop" information centers should be applied as well to Central ERIC, which sells its documents, special reports, audio-visual materials, and tapes through at least four different outlets.

In the interest of providing expedited and more effective reports distribution at lower cost, it is recommended that ERIC investigate possible alternatives for direct distribution of reports by means of SDI systems, both directly to individual users and through State and local agencies.

Document Selection and Input

11. Inferences that can be drawn from user reaction to document selection and input to the ERIC system strongly support the need for feedback on the selection process which will indicate how effectively the present system is working.

This could be accomplished in several ways, primarily through regular reporting by the ERIC Processing and Reference Facility to the clearinghouses on what kinds of documents are being requested and possibly including lists of best sellers by titles. Another method would be to compile perhaps quarterly a cumulative list of documents sold (by ED No.) which would be furnished the clearinghouses for their review. Each clearinghouse would thus be able to determine how well its document input to the ERIC system was received as reflected by user demand requests. Another method would be to circulate quarterly a sample query to users of the standing order collections saying in effect "tell us which documents made available are most useful and conversely, tell us what kinds of documents not appearing in the ERIC system are desired." To the extent possible, State departments of education and State, regional and local information centers should also be enlisted in the feedback effort in order that it be as representative as possible.

12. Policies and procedures underlying growth of the ERIC document collection should be studied in relation to the most effective use of this knowledge base.

This study should involve not only acquisition of documents, including evaluation and selection, but also an assessment of the relative size and scope of the collection in terms of the expressed needs of the various and diverse educational communities. At the present time the archival side of ERIC appears to be steering a middle course, utilizing a limiting growth factor of about 1,000 documents per month, which are announced in *Research in Education* and made available to all potential users. For some highly motivated users this limitation appears too stringent and they would be satisfied by application only of gross negative selection criteria such as overall relevance, minimum technical quality, and non-duplicative content. At the other extreme some users refer to what they believe is a large amount of "trash" and redundancy in the ERIC documents collection. In general, these users feel that a more careful screening would eliminate large numbers of marginally useful documents accepted under current policy and selection criteria. The result would be a reduction of the file to one-half or one-third of its present size and rate of growth.

Given the assumption that ERIC is a practitioner-oriented system, there is little evidence that the present size of the collection inhibits use by the local practitioner, considering also the growth of numerous other forms of synthesis and evaluation available to him. What needs to be studied is the development of a collection policy which will recognize on the one hand the needs of those who wish to have the entire knowledge base encompassed, which the present ERIC policy appears to support, and on the other hand the needs of those who wish to have in their information system only highly selected and evaluated (cf. refereed) documents.

In order to provide an educational knowledge base that will satisfy the broad spectrum of diverse educational interests, the ERIC system would need to restructure its present announcement and distribution practices. The present practice of large-scale collection of documents and their announcement in a general abstract journal such as *RIE* however, is not inconsistent with the provision of special announcements partitioned by educational categories and also stratified by levels of significance of current educational practice. The study should consider this option for development of a range of document-information delivery systems targeted to particular user communities.

Indexing and Abstracting

13. Based on data obtained from numerous sources identified in this report, there is a need for regular feedback on the quality of indexing performed by the clearinghouses.

This concerns particularly how the indexing is used for searching and for the development of search strategies, both manual and machine. Appropriate mechanisms probably could take the form of periodic meetings between information center managers and clearinghouse directors or indexing personnel. Clearinghouses have the option of adding identifiers and of proposing new or revised terms for improvement of the *Thesuarus*. There is missing, however, an essential input from libraries and information centers, reflecting actual user reactions which periodically should be in open exchange with those who have responsibility for indexing.

14. The twin dilemmas of rising costs and overlapping coverage among abstracting and indexing journals need to be further studied in the field of education.

Data developed by this study present convincing evidence that educational agencies, libraries, and information centers in the face of rising costs are confronted increasingly with a choice of subscribing to one or two but not all three of the major indexing journals. The cost for institutions of subscribing to all three journals currently totals $126.00 with *CIJE* alone accounting for three-fifths of this cost. Considering that *Education Index* has a long and entrenched use among local schools and libraries, there appears to be a developing trend among institutions to cut back subscriptions to indexing journals on the basis of cost considerations. This is not likely to influence greatly the number of subscribers to *RIE*, but may already have established a plateau for *CIJE*. This is of course a complicated problem and should not be over-simplified by this survey. Further study, including a search for a better price/distribution formula, needs to be undertaken.

Information Analysis Products

15. A systematic program should be implemented to inform the educational community of the highly useful information analysis products prepared by ERIC clearinghouses and other components.

There is clear evidence in this study that these summary publications are not reaching the large non-research audience for which they are intended and for which users report a great need. The promotion and dissemination of these specially prepared materials should be planned to exploit all possible secondary distribution systems such as State education agencies and other cooperating organizations, including professional associations, which would themselves undertake large-scale free distribution of low-cost items on the basis of potential interest. Direct, targeted distribution of information analysis products should also be undertaken when appropriate, possible on a user-subject basis. The following suggestions are offered as examples of needed actions:

1) *Announcements* of new ERIC summary publications should be brief, attractively formatted, and *furnished as a giveaway* to all organizations

providing service on ERIC publications. Consideration should also be given to an SDI-type announcement sheet targeted to the needs of specific non-research audiences.

2) *Brief, regular announcements* of new information analysis products might well follow the practice of the Superintendent of Documents (GPO) in its bi-weekly publication of *Selected U. S. Government Publications*. Clearinghouses should also step up their announcement activities. The last few pages in *RIE* are not an effective way to help users stay abreast of new ERIC developments.

3) Dual sales distribution of information analysis products via both the Superintendent of Documents (GPO) and EDRS may in some cases be desirable to provide maximum visability and availability. Simultaneous announcement of availability, however, should be made to avoid confusion of potential ERIC users, as may be the case now with the PREP (Putting Research into Educational Practice) reports which are currently withheld three months from announcement in *RIE* following their publication by GPO. Consideration should also be given to *sales distribution of GPO-printed copies by EDRS*. (See also the Recommendation No. 10 relating to document sales and distribution activity.)

16. Two principal types of interpretative summaries should be developed to handle the full range of relevant publics involved:

1) Technical syntheses of research findings for research and university groups.

2) A modification of the technical syntheses to make them more concise, more attractive, and in terms that non-research, local school publics can comprehend. Neither of these types of reports considered alone can do the entire job.

17. New schemes for creative synthesis of facts and ideas appearing in the educational literature should be identified and promoted.

Continued proliferation of the educational literature, together with increased capability for storage of material of limited or special interest, will handicap the practitioner and researcher alike in their efforts to extract useful information relative to their particular interests. As the literature grows in volume and complexity, whether in report form or in journal articles, special methods need to be developed to make retrieval more meaningful than what can be achieved by subject classification and indexing alone. A step that has often been proposed is to strengthen substantially the review function in the information system. This function, however, should not be merely expanded, it must be radically revised and improved.

18. ERIC policy for the support of information analysis products should be re-examined in relation to other means for improving educational communication.

Creative synthesis and compaction of facts and ideas are central to improved communication of research results, but this emphasis on one element of the information flow process should be coordinated with efforts to improve the very beginning of the information cycle, i.e., the generation of information.

Indeed, there is increasing evidence that the great "distill or drown" philosophy will provide only a partial solution to the transfer of meaning as distinct from document delivery.

Interpretive summaries, reviews, digests and other information analysis products are expensive, difficult to prepare, and frequently unread. However, if new means of compression of the literature were developed more closely in relation to greater effectiveness in the generation of information, the communication of educational information could be facilitated without, in any way, impeding the origination of new ideas. This would involve weeding out at the point of origin, by the author and sometimes with peer assistance, the trivial, duplicative and non-technical. The screening process could be based upon accepted criteria of novelty, with a de-emphasis on publication for its own sake. On the mechanical side, structure and modular reporting would need to be devised.

Microfiche Use

19. There is a need for a test of the hypothesis, advanced by some, that local school people are not telling the truth when a high proportion indicate as in this study that they regularly use the microfiche mode--that they are reacting in such as way as to produce a more favorable image of themselves.

This is a phenomenon familiar to those who conduct user studies by questionnaire, sometimes borne out on closer examination and sometimes not. A brief, in-depth study, followed up by on-the-spot interviews and investigation, should be sufficient to prove or disprove this allegation, which is common wherever heavy use of microfiche is reported. It is the judgment of this study, using supplemental information from site visits, panel members, and anecdotal information, that the responses of local school people to this part of the individual user questionnaire are accurately reported.

Strengthening Dissemination

20. A cost-benefit-effectiveness study should be undertaken to determine the most effective and economical methods of announcing ERIC products and services to the large and diverse educational communities.

There is evidence demonstrated by this study that principal reliance upon traditional abstracting and indexing journals, i.e., *CIJE* and *RIE* has diminishing effectiveness in reaching individual users directly or indirectly through libraries and information centers. Additionally, data presented by this study reveal two underlying trends that need to be reversed: (a) almost three-fourths of readers of professional journals containing ERIC columns reported lack of convenient access to the three major abstracting and indexing journals in education and (b) the numbers of subscribers to *CIJE* and *RIE* have not only peaked in the past year but have actually declined over December 1969 levels. It is clear that additional means with wider impact need to be developed for announcing ERIC products and services to users and potential users. Among alternatives or additional mechanisms which need to be explored are SDI systems, separate sectional (partitioned) publication and distribution of the index journals to specific target populations, expansion of machine searching services, educational programs both at the undergraduate level and among non-using professional groups, etc. Particular aspects of this recommendation are detailed under dissemination practices.

21. Large-scale development of educational programs should be carried out to teach users about educational information resources.

This and other recent studies have convincingly demonstrated that large segments of the educational community do not make use of national information services including ERIC, and, indeed, are largely unaware of the existence of these resources. Some educators, while aware of the existence of ERIC services and products, do not use them because of misconceptions relating to their true capabilities and do not exploit them to full advantage. Training seminars directed to managers of libraries and educational information centers, while valuable to center operations, have limited impact upon the educational community as a whole. To have any significant effect, a training program must be capable of hitting a substantial part of the user community. What is really needed are educational programs to teach users and potential users at all levels about ERIC and related information systems, their capabilities and limitations, and how to use these resources most effectively.

The need for education of users of information services has been recognized for some time. In 1963 the President's Science Advisory Committee recommended that schools and colleges should develop programs to teach students how to exploit the literature to fullest advantage. What was needed then for scientists and technologists is certainly needed today as the number of educators multiply and educational knowledge and practice increase in extension and intension. User education should begin at the undergraduate level, with additional research on the relationship between the most efficient use of the current knowledge base in education and the development of more effective educational programs.

22. More attention needs to be given to the role of librarians and information center members in the continuing efforts to make ERIC materials more visible.

Librarians and information center members are, first, knowledgeable of ERIC products and services; and, secondly, are important intermediaries between users and ERIC materials. There are professional groups in the American Library Association, including its American Association of School Librarians Division, the American Society for Information Science, and the Special Library Association which should be utilized for mobilizing professional librarians in the development of a systematic and widespread program for increasing the dissemination of information about ERIC.

VOLUME I - Chapter 3

CHARACTERISTICS OF ERIC USERS

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Chapter 3

CHARACTERISTICS OF ERIC USERS

Overview

The following chapter will deal with the characteristics of ERIC users and as such it will contain: a section dealing with the target populations, sampling frame and returns; a section on general background information of ERIC Users; a section dealing with the primary professional role of ERIC Users; a section dealing with the channels ERIC Users employ in obtaining information; a section on communication among educators; a report on publication record of ERIC Users; a report on the research affiliation of ERIC Users; and a report on the outside responsibilities of ERIC Users.

Target Populations, Sampling Frame and Returns

The following section of this report was devised from information collected from a survey of: organizations, libraries and information centers with ERIC collections; subscribers to the *Current Index to Journals in Education* (CIJE); subscribers to *Research in Education* (RIE); and, individual users at the sampled locations.

The populations, sampling frame, number of questionnaires returned and the percentage of returned questionnaires can be found in the Appendix Volume III, Chapter I entitled Methodology. A quick scan of these data indicate that individual users and organizations, libraries and information centers with ERIC collections each had approximately an 80% return of the questionnaires. The response to the *CIJE* and *RIE* questionnaire was slightly over 50%.

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The 80% return of the questionnaires is quite high and therefore provides a stronger base of support for generalizations back to the target population than does the 50% return. To the extent that the respective 20% and 50% of the nonrespondents are representative (or nonrepresentative) of those responding, the data collected and reported here are unbiased estimates of the population characteristics of ERIC Users. However, the similarity or dissimilarity among the respondents and nonrespondents has not been established and therefore any statements concerning the similarity between the two groups would be sheer speculation. Statistically the effect of the missing 20% of the sample probably does not have serious consequences for the present report, although there is the possibility for misleading interpretation. Consider the effect of having one out of every five scores missing. If the missing scores are like the obtained scores, then the estimates can be very precise, but if the missing scores are systematically different from the obtained scores, then the estimates of population characteristics based only on the obtained scores may be biased. Obviously, the smaller the percentage of nonrespondents, the smaller the problem of obtaining biased results. This has minor implications for the samples with 20% of nonrespondents and major implications for the samples with approximately 50% of nonrespondents. When only one half of the sample responds there is a possibility that estimates based on the obtained data and the actual population characteristics are not synonymous. As previously stated, there is no way to determine this similarity or dissimilarity based upon these data.

The previous discussion necessarily restricts the interpretation and generalizations of these data to the sample of those responding and to the population like these responding; to the extent that these nonrespondents are similar to the respondents, these results are also valid for those samples and populations. By proceeding with this conservative interpretation, one will probably underestimate certain user characteristics. This section of the report will be written with this in mind.

General Background Characteristics of ERIC Users

The individual users of ERIC information were asked to respond to a questionnaire dealing with an evaluation of ERIC products and services (See Appendix Volume III). The summarization of part of these data is presented in Table 3A. Table 3A contains the percentage of ERIC Users responding to the questionnaire when classified by occupation and primary organization or institution. Approximately one half of the users (49.3%) were from colleges or universities. Elementary school personnel comprised 14.5% of the surveyed users with the remaining 46% of the users scattered among the other 11 categories.

This heavy emphasis on ERIC use by persons from colleges or universities is also documented in the tabulation of persons that have conducted research (49.6%) and those that have not conducted research (52.2%). All other institutional or organizational categories show minimal use of the ERIC system with the possible exception of persons from elementary schools (12.7% and 15.4% for conducted and non-conducted research respectively).

When considering the criteria of professional publications the college or university persons again account for approximately one half of the ERIC users in the two categories (yes and no with respect to having published). The remaining 12 organization or institution categories divide the other percentage among themselves with no one category having an outstandingly high percentage. The percentages from the classification of conducted research and publication closely parallel the percentages from the occupational classification.

It is interesting to note that of the 442 respondents, almost 1/3 of them were graduate students (131) and almost 1/4 of the respondents were teachers (99). Forty-nine respondents were administrators, 45 respondents were research and development personnel and 57 respondents were Library or Instructional resources personnel. More than 50% of the respondents had conducted research (228) and approximately 1/4 of the respondents had published professionally (115).

Table 3B shows the percentage of ERIC Users classified by current academic degree and current primary institutional or organizational affiliation. Of the 437 respondents, almost half of them were persons with a master's degree (212). About 1/3 of the respondents were persons with a Bachelor's degree (142) and about 1/10 of the respondents had a doctorate degree (48). Over 90% of the respondents held one or more college or university degrees (see Table 3C.). The discrepancy in figures between Table 3B and Table 3C is caused by missing information on either one or both of the questions used to create the data tables.

Table 3D presents the breakdown of ERIC Users by age categories. Of the 494 persons in the survey, 35.4% of the respondents were in the 26-35 age range, 22.5% were in the 25 or below category and 22.5% were in the 36-45 age range. The remaining 18% is distributed in a decreasing amount over the remaining four categories. These data are consistent with the information presented above, i.e., the ERIC system is used primarily by recent college graduates whose primary affiliations are with colleges and universities. One might hypothesize that the majority of users are graduate students involved in a research activity. Table 3E indicates that slightly more than half of the respondents were female (252) and slightly more than 40% of the respondents were male (208); the remaining percentage of persons failed to respond to this item.

When asked about professional interest areas, the ERIC Users did not respond particularly well. Approximately 1/5 of the persons filling out the questionnaire did not answer this question (see Table 3F). The persons that did respond did not show a particular predisposition to any of the ERIC organizational classifications. Rather, the primary interests of the ERIC Users seem to be scattered across the possible classifications. The Reading (15.6%) and the Library and Information Services (12.3%) were slightly higher than the other categories with respect to the percent of users' interests. This would indicate that persons with a wide variety of academic preparation and interest use the ERIC system rather than persons of similar interests. This interpretation is also supported in the users' responses to secondary and tertiary interests. However, the data is less compelling at the secondary and tertiary interest level as there was a nonresponse rate of 37.8% and 51.3% respectively in the two categories.

Generally, these data suggest that: slightly more females than males use the ERIC system; about 90% of the users are college graduates; most of the users are 35 years of age or less; about 1/3 are graduate students; about 1/4 are teachers; over 1/2 of these persons have conducted research; about 1/4 have published; and no academic interest group in the educational community dominates the use of the ERIC system.

Primary Professional Role of ERIC Users

The data supplied by the individual users of the ERIC system was classified by the user's academic degree and primary professional responsibility. These data can be found in Table 3G. These data suggest that graduate students (30.5%) and teachers (21.3%) were the most frequent users of the ERIC system. Also, approximately 90% of the users have at least attained a bachelor's degree. The data in Table 3H, a one-way classification of the professional responsibility of the ERIC Users, supports the interpretation of graduate students and teachers comprising a large percentage of the users (graduate students 27.9%; teachers 20.7%). The remaining 52% of the surveyed users was scattered across nine remaining categories.

Table 3I presents the classification of ERIC Users by primary professional role and age; and, also displays the classification of ERIC Users by primary professional role and sex; as previously illustrated, the majority of users were under 35 years of age and were graduate students or teachers. Slightly more females (247) than males (195) used the ERIC system.

Table 3J displays the classification of ERIC Users by primary professional role and primary vocational association. Approximately 50% of the users have their primary vocational association with a college or university. The majority of the respondents were again, graduate students and teachers.

Reported Channels Used for Obtaining Information

The responses of individual ERIC Users were classified by reporting channels used for obtaining information and the rank of use of these channels. Table 3K displays this classification. Of the 494 respondents, 28.8% failed to answer the question of rank. Of the remaining 71.2%, who did respond, 22.4% indicated that journal articles were the most important channel of communication. This was closely followed by oral communication (18.8%) and abstracting and indexing services (11.7%). Journal articles were chosen as the second highest channel of communication by 22.1% of the ERIC Users. Books and monographs were named as the second most important channel by 16.4% of the users. The remaining percentages were scattered across other various channels of communications.

The data for classification of ERIC Users by primary channels of communication and primary vocational association can be found in Table 3L. Approximately one-fourth of the individual users did not respond to either one or both of these two items. Approximately one-half of those responding were primarily associated with colleges or universities. Fifty-one of the 337 repondents had their primary association with elementary schools. Journal articles were cited as the primary channel of communication by 31.2% of the respondents. This was closely followed by oral communication, abstracting and indexing services, and books and monographs with 25.5%, 17.2%, and 13.1%, respectively.

Table 3M presents the classification of ERIC Users by primary channel of communication and academic degree. Again, approximately 1/4 of the users did not respond to one or both of the items. Of those responding, over 90% held college degrees. Journal articles and oral communication received the greatest support as the primary channel of communication (30.7% and 27.1% respectively). Journal articles were heavily relied upon by doctoral and master's degree persons.

The classification of ERIC Users by primary channels of communication and age, and primary channels of communication and sex are presented in Table 3N. On the breakdown by age, approximately one-third of each category of users cited journal articles as the primary channel, while oral communication was cited by approximately one-fourth of the 348 respondents. The classification of these data by sex and primary communication channels was similar to the age and primary channel classification results, i.e., journal articles and oral communication comprised the bulk of the responses with females being slightly higher than males in both the number and percentage of responses. Books and monographs and abstracting and indexing services are far behind the reported leaders, but males show greater percentages than females in these categories. As with other contingency tables dealing with primary channels of communication, approximately 150 of the persons responding to the questionnaire did not respond to this item. The reported results must be interpreted with this consideration in mind.

Communication Among Educators

Table 30 presents the classification of ERIC Users by primary vocational association and the average number of times per month they are contacted by other educators seeking information about their current work. Approximately 150 of the respondents failed to complete this item. Of those who did respond, 34.9% indicated that they averaged one contact per month; 14.1% indicated that they were contacted two to three times per month; 13.8% indicated that they averaged four to five contacts per month. The greatest number of these respondents were college and university associated (169) and 45% of these persons reported at least one contact per month.

Table 3P presents the classification of ERIC users by academic degree and the average number of times per month they were contacted by other educators about their current work. The results revealed that as the level of academic preparation increased, the average number of contacts per month also tended to increase, e.g., high school diploma and bachelor degree persons indicated minimum numbers of contacts (approximately 50%) and as the number of contacts increased, low percentages resulted whereas advanced degree respondents showed moderate levels of the minimum number of contacts with only slight decreases as the average number of contacts per month increased. Approximately 150 people failed to respond to this item.

The classification of ERIC Users by the average number of times per month contacted by other educators seeking information regarding current work, and by age and sex can be seen in Table 3Q. Approximately 140 people did not respond to this item. As the age categorization increased chronologically there appeared to be a corresponding increase in the average number of contacts per month, i.e., older persons tended to have a greater number of contacts than the younger respondents. Males also seemed to have a greater number of contacts per month than did females. Forty-three and one tenth percent of the females had only one contact per month compared with 24.5% of the males having had only one contact per month. The age categories of 36 to 45, 46 to 55, and 56 to 65 appeared to have the greatest number of contacts.

Table 3AA presents the classification of ERIC Users by the average number of times per month the respondent is contacted by other educators seeking information related to the respondent's current work. On this item, 26.9% of the persons did not answer. The results indicated 25.7% were contacted once; there was approximately a 10% contact rate in the other four categories. There was obviously a communication flow, at some level, among educators.

Publication Record of ERIC Users

Table 3R presents the classification of ERIC Users by number of books or papers published during the past five years and by academic degree. Approximately 60 persons failed to respond to this item. Of those who did respond, 72.9% have not published, 9.9% have published once and 11.2% have published two to five times. Persons with doctoral degrees have published most frequently with 32.7% of them publishing two to five times. As the academic preparation (degree level) increased, there was a tendency for an increased number of publications.

Table 3S presents the classification of ERIC Users by the number of books or papers published during the past five years and by primary vocational association. There were approximately 60 users who failed to respond to this item. When categorized in this fashion, publication is derived largely from four sources, the largest source being college and university personnel. The other three sources were personnel from state departments of education, regional educational laboratories and research and development centers. Less than 4% of the users had six or more publications.

The classification of ERIC Users by number of books or papers published in the past five years and users age and sex can be seen in Table 3T. Approximately 50 persons failed to respond to this item. As the age chronologically increased, the number of publications tended to increase. Males had a much greater rate of publication than did females, i.e., 85.7% of the female users had not published in the past five years whereas 57.5% of the male users had not published in that time.

Table 3Z displays the classification of ERIC Users by the number of books or papers published within the last five years. Of the 494 respondents, only 8.1% failed to answer this question, but 67.6% of the respondents have not published within the last five years; 8.9% have one publication and 10.1% have 2-5 publications. All other categories have percentages less than 2%.

Research Affiliation

Table 3U presents the classification of ERIC Users by research conducted or participated in during the past five years and by primary vocational association. Approximately 90 persons failed to respond to this item. Of those who did respond, 44.4% reported some research affiliation during the past five years. State department of educational personnel (9) reported no research affiliation within the past five years while pre-school teaching personnel reported a 71.4% research affiliation in that same time. The other categories are distributed somewhere between these two extremes.

Table 3V displays the classification of ERIC Users by research affiliation within the past five years and by academic degree. With an increase in the academic preparation (higher degrees attained) of those persons responding (approximately 85 persons failed to respond to this item) there tended to be an increase in the individual's research affiliation.

The research affiliation of persons with a high school diploma was 13.3% (the low percentage); persons with a doctorate reported a 75.0% affiliation with research. All other categories were between the two extremes.

Table 3W presents the classification of ERIC Users by research affiliation and by user age and sex. Approximately 74 persons did not respond to these items. Of the persons responding, the distribution across age levels tended to be fairly flat, with the possible exception of persons under 25, i.e., age did not seem to make much difference with respect to research affiliation. However, there was a difference in the sex and research affiliations of the users. More than half of the male respondents (52.1%) had research affiliations within the last five years, but only 37.9% of the females had research affiliations within the last five years.

Table 3X presents the classification of ERIC Users by use of Research in Education during 1970 and the users academic degree. Approximately 140 persons did not respond to these items. Of those persons responding, 65.9% indicated that they searched past issues or volumes to locate specific information, while 17.2% indicated reading or scanning each issue for current awareness. Eight point three percent reported using both methods and 8.6% reported they never used this source of information. There does not appear to be anything striking about the use or nonuse of this source across the various levels of academic degree.

Table 3Y indicates the classification of ERIC Users by research affiliation within the last five years. Of the 494 respondents 48.4% reported having been affiliated with a research project within the last five years; 38.5% reported no research affiliation within the last five years and 13.2% did not answer the question.

Outside Responsibilities of ERIC Users

When dichotomously classified by responsibilities beyond their primary vocational association (outside responsibilities), 33% of the 436 persons responding to this item replied affirmatively (see Table 3BB). There does not appear to be any single vocational category glaringly exceeding the other categories in percentage of "yes" responses, i.e., the distribution of "yes" responses was flat across the vocational categories.

According to Table 3CC, classification of ERIC Users by outside professional responsibilities and academic degree level, persons with degrees beyond the bachelors (59.0%, 22%, 56%, and 42%) had greater outside responsibilities than persons with a bachelor's degree or less (10% and 15%). There were approximately 55 persons who did not respond to this item. Of those persons responding and holding a master's or doctoral degree, more than 50% had outside responsibilities.

The data in Table 3DD, the classification of ERIC Users by outside professional responsibilities and by sex and age, indicated a relationship between age and outside responsibilities, i.e., with an increase in chronological age there tended to be an increase in the percentage of outside professional responsibilities. The relationship was not perfect, but it was strong. Also, males tended to have more outside responsibilities than females (43.1% to 26.1% respectively).

Table 3EE, the classification of ERIC Users by outside professional responsiblities indicated that of the 494 respondents, 7.5% failed to respond to the question. Thirty-one percent of the respondents indicated an outside professional responsibility while 61.5% indicated on outside professional responsibility. Thus about one-third of the surveyed ERIC Users have outside professional responsibilities.

TABLE 3A

PRIMARY ORGANIZATION OR INSTITUTION OF THE SURVEYED INDIVIDUAL USER RESPONDENTS WHEN CONSIDERING OCCUPATION, RESEARCH ACTIVITIES AND PUBLICATION

	1**	2	3	4	5	6	7	8	9	10	11	12	13		(N)
Occupation															
Administration or supervision	4.1	10.2	8.2	26.5	12.2	4.1	0.0	4.1	6.1	4.1	2.0	0.0	18.4	100	(49)
Teaching	3.0	41.4	19.2	34.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	100	(99)
Pupil personnel services	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(4)*
Research and development	0.0	4.4	6.7	15.6	8.9	33.3	13.3	0.0	0.0	4.4	0.0	2.2	11.1	100	(45)
Library or instructional resources	0.0	1.8	3.5	68.4	3.5	8.8	1.8	0.0	0.0	0.0	0.0	0.0	12.3	100	(57)
Consulting	0.0	0.0	0.0	6.7	6.7	6.7	6.7	6.7	0.0	6.7	0.0	0.0	60.0	100	(15)
Undergraduate student	0.0	4.5	0.0	90.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	100	(22)
Graduate student	1.5	9.2	1.5	74.8	0.0	0.0	3.1	0.0	0.0	.8	.8	0.0	8.4	100	(131)
Other	0.0	10.0	5.0	20.0	0.0	20.0	5.0	0.0	0.0	10.0	0.0	0.0	25.0	100	(20)
Overall	1.6	14.5	7.5	49.3	2.9	6.3	2.9	.7	.9	1.8	.5	.2	10.9	100	(442)
Conducted research: Yes	.9	12.7	8.3	49.6	3.9	4.4	1.8	0.0	.9	1.3	.9	.4	14.9	100	(228)
No	2.7	15.4	7.1	52.2	0.0	8.2	4.9	.5	1.1	1.1	0.0	0.0	6.6	100	(182)
Published: Yes	0.0	4.3	5.2	57.4	3.5	10.4	4.3	.9	.9	1.7	0.0	0.0	11.4	100	(115)
No	2.2	17.4	7.9	46.8	2.5	5.1	2.5	.6	.6	1.9	.6	.3	11.3	100	(316)

Source: Individual User Questionnaire

*Where N < 5 calculations have been omitted

**1. Preschool
2. Elementary
3. Secondary
4. College or univer.
5. State Dept. of Ed.
6. Regional Ed. Lab.
7. R & D. Center
8. Profes. Organization
9. OE Regional Office
10. Other Fed. Agency
11. Local or Reg. Info. Center
12. Business or Industry
13. Other

TABLE 3B

CLASSIFICATION OF ERIC USERS' BY AFFILIATION AND ACADEMIC DEGREE

Academic Degree	Pre-School	Elementary School	Secondary School	College or University	State Dept. of Education	Regional Educational Laboratory	Research and Development Center
High School Diploma	0.0%	10.5%	0.0%	73.7%	0.0%	0.0%	0.0%
Bachelor's	2.8	17.6	7.7	47.9	1.4	4.2	2.1
Master's	.9	12.3	9.4	47.6	4.7	6.6	2.8
Specialist's	11.1	22.2	22.2	33.3	0.0	0.0	0.0
Doctorate	0.0	8.3	2.1	54.2	4.2	12.5	6.3
Other	0.0	14.3	0.0	57.1	0.0	14.3	0.0
Overall	1.6	13.7	7.8	49.4	3.2	6.2	2.7

Academic Degree	Professional Organization	Office of Education Regional Office	Other Federal Agency	Local or Regional Information Center	Business or Industry	Other	N
High School Diploma	0.0%	0.0%	5.3%	0.0%	0.0%	10.5%	100% (19)
Bachelor's	0.0	.7	1.4	0.0	.7	13.4	100% (142)
Master's	.9	.5	1.9	.9	0.0	11.3	100% (212)
Specialist's	11.1	0.0	0.0	0.0	0.0	0.0	100% (9)
Doctorate	0.0	4.2	2.1	0.0	0.0	6.3	100% (48)
Other	0.0	0.0	0.0	0.0	0.0	14.3	100% (7)
Overall	.7	1.9	1.8	.5	.2	11.2	100% (437)

Source: Individual User Questionnaire

TABLE 3C

ACADEMIC DEGREES HELD BY ERIC USERS

Degree Level	Percent	(N)
High School Diploma	4.0	(20)
Bachelor's	30.6	(151)
Master's	46.2	(228)
Specialist's	2.0	(10)
Doctorate	9.9	(49)
Other	1.4	(7)
No Response	5.9	(28)
Totals	100.0	(493)

Source: Individual User Questionnaire

TABLE 3D

AGE GROUP CLASSIFICATION OF ERIC USERS

	Percent	Number
25 or Below	22.5	111
26 - 35	35.4	175
36 - 45	22.5	111
46 - 55	12.6	62
56 - 65	2.4	12
Over 65	.6	3
No Response	4.0	20

N = 494

TABLE 3E

SEX CLASSIFICATION OF ERIC USERS

	Percent	Number
Male	42.1	208
Female	51.0	252
No Response	6.9	34

N = 494

Source: Individual User Questionnaire

TABLE 3F

ERIC USERS' AREAS OF PROFESSIONAL INTEREST IN FIELDS OF EDUCATION AS RELATED TO ERIC CLEARINGHOUSES

Clearinghouse Organizations	Interest					
	Primary		Secondary		Tertiary	
	%	N	%	N	%	N
Adult Education	1.8	9	1.2	6	1.2	6
Counseling and Personnel Services	2.6	13	2.0	10	1.4	7
Disadvantaged	5.3	26	5.1	25	6.1	30
Early Childhood Education	4.9	24	5.7	28	4.9	24
Educational Administration	8.3	41	3.8	19	2.4	12
Education Media and Technology	3.4	15	3.6	18	2.2	11
Exceptional Children	3.4	17	1.8	9	2.6	13
Higher Education	3.8	19	3.4	17	3.0	15
Junior Colleges	.8	4	2.4	12	1.6	8
Library and Information Services	12.3	61	3.0	15	1.0	5
Linguistics	.6	3	3.8	19	2.2	11
Reading	15.6	77	7.3	36	2.0	10
Rural Education and Small Schools	.8	4	.8	4	1.2	6
Science and Mathematics Education	2.2	11	.6	3	1.0	5
Social Sicence Education	1.2	6	1.8	9	2.0	10
Teacher Education	3.8	19	9.1	45	7.7	38
Teaching of English	2.2	11	1.8	9	1.8	9
Teaching of Foreign Languages	1.2	6	.6	3	.2	1
Tests, Measurement, and Evaluation	1.6	8	3.8	19	3.4	17
Vocational and Technical Education	3.2	16	.6	3	.8	4
No Response	21.0	104	37.8	185	51.3	252
	100.0	494	100.0	494	100.0	494

Source: Individual User Questionnaire

TABLE 3G

CLASSIFICATION OF ERIC USERS BY PRIMARY PROFESSIONAL ROLE OR FUNCTION AND ACADEMIC DEGREE

Academic Degree	Administration or Supervision	Teaching	Pupil Personnel Services	Research and Development	Library or Instructional Resources	Consulting
High School Diploma	0.0%	0.0%	0.0%	5.3%	15.8%	0.0%
Bachelor's	2.7	2.5	.7	5.4	12.9	2.0
Master's	16.7	15.8	.9	9.3	15.3	5.1
Specialist's	30.0	20.0	10.0	0.0	0.0	0.0
Doctorate	16.7	41.7	0.0	31.3	2.1	2.1
Other	14.3	28.6	0.0	14.3	0.0	0.0
Overall	11.7	21.3	.9	10.1	12.6	3.4

Academic Degree	Undergraduate Student	Graduate Student	Other	N
High School Diploma	68.4%	0.0%	10.5%	100% (19)
Bachelor's	5.4	41.5	4.1	100% (147)
Master's	0.0	32.6	4.2	100% (215)
Specialist's	0.0	20.0	20.0	100% (10)
Doctorate	0.0	2.1	4.2	100% (48)
Other	14.3	28.6	0.0	100% (7)
Overall	4.9	30.5	4.7	100% (446)

Source: Individual User Questionnaire

TABLE 3H

CLASSIFICATION OF ERIC USERS BY PRIMARY PROFESSIONAL ROLE

Professional Role	Primary %	 N	Secondary %	 N
Administration or Supervision	10.9	(54)	2.7	(13)
Teaching	20.7	(102)	5.6	(27)
Pupil Personnel Services	.8	(4)	.4	(2)
Research and Development	9.3	(46)	4.4	(21)
Library or Instructional Resources	11.9	(59)	2.1	(1)
Consulting	3.2	(16)	1.4	(7)
Undergraduate Student	4.9	(24)	1.4	(7)
Graduate Student	27.9	(138)	17.3	(85)
Other	4.5	(22)	1.6	(8)
No Response	5.9	(29)	63.1	(312)
Totals	100.0	(494)	100.0	(483)

Source: Individual User Questionnaire

TABLE 31

CLASSIFICATION OF ERIC USERS BY PRIMARY PROFESSIONAL ROLE, AGE AND SEX

	Administration or Supervision	Teaching	Pupil Personnel Services	Research & Development	Library & Instructional Resources	Consulting	Under-graduate Student	Graduate Student	Other	N
Age										
25 or Below	.9%	26.9%	.9%	4.6%	10.2%	1.9%	17.6%	36.1%	.9%	100% (108)
26-35	7.0	19.9	1.2	14.0	13.5	2.9	1.8	35.1	4.7	100% (171)
36-45	16.8	20.6	.9	12.1	10.3	5.6	0.0	25.2	8.4	100% (107)
46-55	28.3	20.0	0.0	5.0	18.3	3.3	1.7	18.3	5.0	100% (60)
56-65	54.5	27.3	0.0	0.0	18.2	0.0	0.0	0.0	0.0	100% (11)
Over 65	----	----	----	----	----	----	----	----	----	---- (3)*
Overall	11.7	21.7	.9	10.0	12.6	3.5	5.0	30.0	4.6	100% (460)
Sex										
Male	16.9	22.1	1.0	11.3	5.6	3.1	6.2	28.7	5.1	100% (195)
Female	7.7	19.8	.8	9.3	18.2	3.6	4.0	32.4	4.0	100% (247)

Source: Individual User Questionnaire

*Where N <5, calculations have been omitted.

TABLE 3J

CLASSIFICATION OF ERIC USERS BY PRIMARY PROFESSIONAL ROLE AND PRIMARY VOCATIONAL ASSOCIATION

Primary vocational Association	Administration or Supervision	Teaching	Pupil Personnel Services	Research and Development	Library or Instructional Resources	Consulting	Undergraduate Student	Graduate Student	Other	N	
Preschool	28.6%	42.9%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	0.0%	100%	(7)
Elementary	7.8	64.1	0.0	3.1	1.6	0.0	1.6	18.7	3.1	100%	(64)
Secondary	12.1	57.6	6.1	9.1	6.1	0.0	0.0	6.1	3.0	100%	(33)
College or University	6.0	15.6	.9	3.2	17.9	.5	9.2	45.0	1.8	100%	(218)
State Department of Education	46.2	0.0	0.0	30.8	15.4	7.7	0.0	0.0	0.0	100%	(13)
Regional Educational Laboratory	7.1	3.6	0.0	53.6	17.9	3.6	0.0	0.0	14.3	100%	(28)
Research and Development Center	0.0	0.0	0.0	46.2	7.7	7.7	0.0	30.8	7.7	100%	(13)
Professional Organization	----	----	----	----	----	----	----	----	----	----	(3)*
Office of Education Regional Office	----	----	----	----	----	----	----	----	----	----	(4)*
Other Federal Agency	25.0	0.0	0.0	25.0	0.0	12.5	0.0	12.5	25.0	100%	(8)
Local or Regional Information Center	----	----	----	----	----	----	----	----	----	----	(2)*
Business or Industry	----	----	----	----	----	----	----	----	----	----	(1)*
Other	18.7	2.1	0.0	10.4	14.6	18.7	2.1	22.9	10.4	100%	(48)
Overall	11.1	22.4	.9	10.2	12.9	3.4	5.0	29.6	4.5	100%	(442)

Source: Individual User Questionnaire

TABLE 3K

CLASSIFICATION OF INDIVIDUAL USERS' CHANNELS FOR OBTAINING INFORMATION AND RANK OF THE CHANNELS

Channels of Communication	Rank Primary %	 N	 Secondary %	 N	 Tertiary %	 N
Oral Communication	18.8	(93)	9.7	(48)	10.1	(50)
Journal Articles	22.4	(110)	22.1	(109)	12.2	(60)
Books and Monographs	9.5	(47)	16.4	(81)	11.4	(56)
Reports	1.8	(9)	4.5	(22)	9.5	(47)
Abstracting and Indexing Services	11.7	(58)	5.5	(27)	7.5	(37)
Professional Meetings	3.8	(19)	7.3	(36)	6.3	(31)
Correspondence/Reprints	1.0	(5)	2.2	(11)	3.6	(18)
Other	2.2	(11)	.6	(3)	.2	(1)
No Response	28.8	(142)	31.7	(156)	39.2	(193)
Totals	100.0	(494)	100.0	(493)	100.0	(493)

Source: Individual User Questionnaire

TABLE 3L

CLASSIFICATION OF ERIC USERS BY PRIMARY CHANNELS OF COMMUNICATION AND PRIMARY VOCATIONAL ASSOCIATION

Primary vocational Association	Oral Communication	Journal Articles	Books and Monographs	Reports	Abstracting and Indexing Services	Professional Meetings	Correspondence and/or Reprints	Other	N	
Preschool	33.3%	33.3%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	100%	(6)
Elementary	35.3	33.3	5.9	3.9	9.8	9.8	0.0	2.0	100%	(51)
Secondary	26.9	19.2	7.7	3.8	26.9	15.4	0.0	0.0	100%	(26)
College or University	22.1	36.2	18.4	1.2	17.2	1.8	.6	2.5	100%	(163)
State Department of Education	28.6	42.9	0.0	0.0	14.3	0.0	14.3	0.0	100%	(7)
Regional Educational Laboratory	21.7	26.1	4.3	4.3	30.4	4.3	4.3	4.3	100%	(23)
Research and Development Center	33.3	33.3	8.8	8.8	8.8	8.8	0.0	0.0	100%	(12)
Professional Organization	----	----	----	----	----	----	----	----	----	(2)*
Office of Education Regional Office	----	----	----	----	----	----	----	----	----	(3)*
Other Federal Agency	14.3	14.3	14.3	0.0	28.6	14.3	14.3	0.0	100%	(7)
Local or Regional Information Center	----	----	----	----	----	----	----	----	----	(2)*
Business or Industry	----	----	----	----	----	----	----	----	----	(1)*
Other	26.5	14.7	17.6	5.9	14.7	2.9	2.9	14.7	100%	(34)
Overall	25.5	31.2	13.1	2.7	17.2	5.6	1.5	3.3	100%	(337)

TABLE 3M

CLASSIFICATION OF ERIC USERS BY PRIMARY CHANNEL OF COMMUNICATION AND ACADEMIC DEGREE

Academic Degree	Oral Communication	Journal Articles	Books and Monographs	Reports	Abstracting and Indexing Services
High School Diploma	36.4%	18.2%	18.2%	0.0%	18.2%
Bachelor's	31.5	29.7	12.6	1.8	14.4
Master's	24.2	31.5	13.9	1.8	16.4
Specialist's	16.7	16.7	16.7	0.0	16.7
Doctorate	27.0	37.8	5.4	8.1	18.9
Other	16.7	16.7	50.0	0.0	16.7
Overall	27.1	30.7	13.4	2.4	16.1

Academic Degree	Professional Meetings	Correspondence And/or Reprints	Other	N
High School Diploma	0.0%	0.0%	9.1%	100% (11)
Bachelor's	1.8	.9	7.2	100% (111)
Master's	8.5	2.4	1.2	100% (165)
Specialist's	33.3	0.0	0.0	100% (6)
Doctorate	2.7	0.0	0.0	100% (37)
Other	0.0	0.0	0.0	100% (6)
Overall	5.7	1.5	3.3	100% (336)

Source: Individual User Questionnaire

TABLE 3N

CLASSIFICATION OF ERIC USERS BY PRIMARY CHANNELS OF COMMUNICATION, AGE AND SEX

Age	Oral Communication	Journal Articles	Books and Monographs	Reports	Abstracting And Indexing Services	Professional Meetings	Correspondence And/or Reprints	Other	N
25 or below	33.7%	26.2%	17.2%	1.2%	16.2%	1.2%	0.0%	3.7%	100% (80)
26-35	26.8	31.2	13.0	2.9	15.9	5.1	.7	4.3	100% (138)
36=45	18.7	38.7	12.5	3.7	13.7	10.0	1.2	1.2	100% (80)
46-55	30.0	27.5	12.5	0.0	15.0	5.0	7.5	2.5	100% (40)
56-65	12.5	25.0	0.0	12.5	37.5	12.5	0.0	0.0	100% (8)
Over 65	----	----	----	----	----	----	----	----	---- (2)*
Overall	26.4	31.3	13.5	2.6	16.1	5.5	1.4	3.2	100% (348)
Sex									
Male	22.9	28.8	17.0	2.6	17.6	7.2	2.0	2.0	100% (153)
Female	30.2	32.4	10.6	2.2	15.1	4.5	1.1	3.9	100% (179)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 30

CLASSIFICATION OF ERIC USERS BY AVERAGE NUMBER OF TIMES PER MONTH CONTACTED BY OTHER EDUCATORS SEEKING INFORMATION ABOUT CURRENT WORK AND PRIMARY VOCATIONAL ASSOCIATION

Primary Association	1	2-3	4-5	6-10	11-25	16-20	Over 20	N	
Preschool	16.7%	33.3%	16.7%	0.0%	0.0%	16.7%	16.7%	100%	(6)
Elementary	42.2	15.6	4.4	8.9	0.0	11.1	17.8	100%	(45)
Secondary	28.0	17.9	25.0	14.3	0.0	7.1	7.1	100%	(28)
College or University	45.0	11.3	14.2	10.1	1.8	5.9	11.2	100%	(169)
State Dept. of Education	10.0	10.0	10.0	0.0	0.0	10.0	60.0	100%	(10)
Regional Educational Laboratory	20.0	16.0	24.0	4.0	4.0	16.0	16.0	100%	(25)
Research and Development Center	0.0	14.3	42.9	28.6	0.0	14.3	0.0	100%	(7)
Professional Organization	----	----	----	----	----	----	----	----	(2)*
Office of Education Regional Office	----	----	----	----	----	----	----	----	(4)*
Other Federal Agency	28.6	28.6	0.0	0.0	0.0	28.6	14.3	100%	(7)
Local or Regional Information Center	----	----	----	----	----	----	----	----	(2)*
Business or Industry	----	----	----	----	----	----	----	----	(1)*
Other	17.1	17.1	7.3	9.8	7.3	22.0	19.5	100%	(41)
Overall	34.9	14.1	13.8	9.8	2.0	10.7	14.4	100%	(347)

Source: Individual User Questionnaire
*Where N <5, calculations have been omitted.

TABLE 3P

CLASSIFICATION OF ERIC USERS BY AVERAGE NUMBER OF TIMES PER MONTH CONTACTED BY OTHER EDUCATORS ABOUT CURRENT WORK AND ACADEMIC DEGREE

Academic Degree	1	2-3	4-5	6-10	10-15	16-20	21+		(N)
High School Diploma	50.0%	10.0%	0.0%	0.0%	0.0%	10.0%	30.0%	100%	(10)
Bachelor's	51.4	10.7	9.7	6.8	3.9	7.8	9.7	100%	(103)
Master's	27.1	16.3	14.7	13.0	1.1	9.8	18.0	100%	(184)
Specialist's	33.3	50.0	16.7	0.0	0.0	0.0	0.0	100%	(6)
Doctorate	20.5	20.5	15.4	7.7	5.1	17.9	12.8	100%	(39)
Other	16.7	0.0	33.3	16.7	0.0	16.7	16.7	100%	(6)
Overall	34.2	15.2	13.2	10.1	2.3	10.1	14.9	100%	(348)

Source: Individual User Questionnaire

TABLE 3Q

CLASSIFICATION OF ERIC USERS BY AVERAGE NUMBER OF TIMES PER MONTH CONTACTED BY OTHER EDUCATORS SEEKING INFORMATION ABOUT CURRENT WORK, AGE AND SEX

	1	2-3	4-5	6-10	10-15	16-20	21+		(N)
Age									
25 or below	53.1%	12.6%	8.9%	6.3%	0.0%	7.6%	11.4%	100%	(79)
26 - 35	36.2	15.2	15.9	10.9	2.9	6.5	12.3	100%	(138)
36 - 45	21.2	16.5	18.8	9.4	4.7	10.5	18.8	100%	(85)
46 - 55	31.9	15.0	8.5	10.6	0.0	15.0	19.1	100%	(47)
56 - 65	10.0	10.0	0.0	30.0	0.0	40.0	10.0	100%	(10)
Over 65	----	----	----	----	----	----	----	----	(1)*
Overall	35.0	14.7	13.6	10.0	2.2	10.0	14.4	100%	(360)
Sex									
Male	24.5	19.6	17.2	12.3	3.7	9.2	13.5	100%	(163)
Female	43.1	11.0	9.9	8.3	1.1	10.5	16.0	100%	(181)

Source: Individual User Questionnaire
* Where N<5 calculations have been omitted

TABLE 3R

CLASSIFICATION OF ERIC USERS BY NUMBER OF BOOKS OR PAPERS PUBLISHED IN THE PAST FIVE YEARS AND ACADEMIC DEGREE

Academic Degree	None	1	2-5	6-10	More Than 10	Cannot Estimate	N
High School Diploma	87.5%	0.0%	6.3%	6.3%	0.0%	0.0%	100% (16)
Bachelor's	91.8	4.8	2.1	.7	.7	0.0	100% (146)
Master's	69.4	14.4	12.4	1.4	.5	1.9	100% (209)
Specialist's	55.6	0.0	22.2	11.1	0.0	11.1	100% (9)
Doctorate	28.6	12.2	32.7	6.1	12.2	8.2	100% (49)
Other	85.7	0.0	14.3	0.0	0.0	0.0	100% (7)
Overall	72.9	9.9	11.2	2.1	1.8	2.1	100% (436)

Source: Individual User Questionnaire

TABLE 3S

CLASSIFICATION OF ERIC USERS BY NUMBER OF BOOKS OR PAPERS PUBLISHED DURING THE PAST FIVE YEARS AND PRIMARY VOCATIONAL ASSOCIATION

Primary Association	None	1	2-5	6-10	Over 10	No Estimate	N	
Preschool	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	(7)
Elementary	91.7	3.3	3.3	1.7	0.0	0.0	100%	(60)
Secondary	80.6	6.5	9.7	3.2	0.0	0.0	100%	(31)
College or University	69.2	13.6	10.7	.9	3.3	2.3	100%	(214)
State Department of Education	66.7	8.3	16.7	8.3	0.0	0.0	100%	(12)
Regional Educational Laboratory	57.1	3.6	35.7	3.6	0.0	0.0	100%	(28)
Research and Development Center	61.5	30.8	7.7	0.0	0.0	0.0	100%	(13)
Professional Organization	----	----	----	----	----	----	----	(3)*
Office of Education Regional Office	----	----	----	----	----	----	----	(3)*
Other Federal Agency	75.0	0.0	0.0	0.0	12.5	12.5	100%	(8)
Local or Regional Information Center	----	----	----	----	----	----	----	(2)*
Business or Industry	----	----	----	----	----	----	----	(1)*
Other	73.5	6.1	12.2	4.1	0.0	4.1	100%	(49)
Overall	73.3	9.7	11.4	1.9	1.9	1.9	100%	(431)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 3T

CLASSIFICATION OF ERIC USERS BY NUMBER OF BOOKS OR PAPERS PUBLISHED IN THE PAST FIVE YEARS, AND USERS AGE AND SEX

	None	1	2-5	6-10	More Than 10	Can't Estimate	(N)
Age							
25 or Below	90.7%	5.6%	2.8%	.9%	0.0%	0.0%	100%(107)
26-35	65.9	12.2	15.9	3.7	1.2	1.2	100%(164)
36-45	74.5	7.5	11.3	0.0	1.9	4.7	100%(106)
46-55	69.0	12.1	8.6	3.4	3.4	3.4	100% (58)
56-65	58.3	0.0	33.3	0.0	8.3	0.0	100% (12)
Over 65	----	----	----	----	----	----	---- (3)*
Overall	73.6	9.6	11.1	2.0	1.8	2.0	100%(450)
Sex							
Male	57.7	13.9	20.6	2.6	3.1	2.1	100%(194)
Female	85.7	6.3	3.8	1.7	.4	2.1	100%(237)

Source: Individual User Questionnaire
* Where N< 5, calculations have been omitted.

TABLE 3U

CLASSIFICATION OF ERIC USERS BY RESEARCH AFFILIATION DURING THE PAST FIVE YEARS AND PRIMARY VOCATIONAL ASSOCIATION

Primary Association	Yes	No	N
Preschool	71.4%	28.6%	100% (7)
Elementary	49.1	50.9	100% (57)
Secondary	40.6	59.4	100% (32)
College or University	45.7	54.3	100% (208)
State Department of Education	0.0	100.0	100% (9)
Research and Development Center	69.2	30.8	100% (13)
Regional Educational Laboratory	60.0	40.0	100% (25)
Professional Organization	---	---	--- (1)*
Office of Education Regional Office	---	---	--- (4)*
Other Federal Agency	40.0	60.0	100% (5)
Local or Regional Information Center	---	---	--- (2)*
Business or Industry	---	---	--- (1)*
Other	26.1	73.9	100% (46)
Overall	44.4	55.6	100% (410)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 3V

CLASSIFICATION OF ERIC USERS BY RESEARCH AFFILIATION WITHIN THE PAST FIVE YEARS AND ACADEMIC DEGREE

Academic Degree	Yes	No	N
High School Diploma	13.3%	86.7%	100% (15)
Bachelor's	28.2	71.8	100% (142)
Master's	52.5	47.5	100% (200)
Specialist's	50.0	50.0	100% (8)
Doctorate	75.0	25.0	100% (44)
Other	33.3	66.7	100% (6)
Overall	44.8	55.2	100% (415)

Source: Individual User Questionnaire

TABLE 3W

CLASSIFICATION OF ERIC USERS BY RESEARCH AFFILIATION WITHIN THE PAST FIVE YEARS, AGE AND SEX

	Yes	No	N
Age			
25 or below	34.7%	65.3%	100% (98)
26-35	49.1	50.9	100% (161)
36-45	45.5	54.5	100% (99)
46-55	47.3	52.7	100% (55)
56-65	45.5	54.5	100% (11)
Over 65	----	----	---- (2)*
Overall	44.4	55.6	100% (426)
Sex			
Male	52.1	47.9	100% (188)
Female	37.9	52.1	100% (224)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 3X

CLASSIFICATION OF ERIC USERS BY USE OF RESEARCH IN EDUCATION DURING 1970 AND ACADEMIC DEGREE

Academic Degree	Read or scan Each issue For current Awareness	Search past Issues or volumes To locate specific Information	Both	Never Used	N
High School Diploma	18.2%	63.6%	0.0%	18.2%	100% (11)
Bachelor's	7.7	71.8	7.7	12.8	100% (117)
Master's	23.5	63.7	9.5	3.4	100% (179)
Specialist's	33.3	50.0	0.0	16.7	100% (6)
Doctorate	17.1	61.0	9.8	12.2	100% (41)
Other	0.0	71.4	0.0	28.6	100% (7)
Overall	17.2	65.9	8.3	8.6	100% (361)

Source: Individual User Questionnaire

TABLE 3Y

CLASSIFICATION OF ERIC USERS BY RESEARCH AFFILIATION WITHIN PAST FIVE YEARS

	Percent	(N)
Yes	48.4	239
No	38.5	190
No Response	13.2	65
	100.0	494

Source: Individual User Questionnaire

TABLE 3Z

CLASSIFICATION OF ERIC USERS BY NUMBER OF BOOKS OR PAPERS PUBLISHED WITHIN THE LAST FIVE YEARS

Frequency	Percent	(N)
None	67.6	334
1	8.9	44
2-5	10.1	50
6-10	1.8	9
10+	1.6	8
No Number Given	1.8	9
No Response	8.1	40
	100.0	494

Source: Individual User Questionnaire

TABLE 3AA

CLASSIFICATION OF ERIC USERS BY AVERAGE NUMBER OF TIMES RESPONDENT IS CONTACTED BY OTHER EDUCATORS SEEKING INFORMATION RELATED TO RESPONDENTS CURRENT WORK

Frequency	Percent	(N)
1	25.7	127
2-3	10.7	53
4-5	9.9	49
6-10	7.3	36
11-20	9.1	45
21 +	10.4	51
No Response	26.9	133
	100.0	494

Source: Individual User Questionnaire

TABLE 3BB

CLASSIFICATION OF ERIC USERS BY OUTSIDE RESPONSIBILITIES AND PRIMARY VOCATIONAL ASSOCIATION

Primary Association	Yes	No	N	
Preschool	33.3%	66.7%	100%	(6)
Elementary	23.3	76.7	100%	(60)
Secondary	34.4	65.6	100%	(32)
College or University	29.8	70.2	100%	(218)
State Department of Education	42.9	57.1	100%	(14)
Regional Educational Laboratory	29.6	70.4	100%	(27)
Research and Development Center	50.0	50.0	100%	(12)
Professional Organization	---	---	---	(3)*
Office of Education Regional Office	---	---	---	(4)*
Other Federal Agency	25.0	75.0	100%	(8)
Local or Regional Information Center	---	---	---	(2)*
Business or Industry	---	---	---	(1)*
Other	42.9	57.1	100%	(49)
Overall	33.0	67.0	100%	(436)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 3CC

CLASSIFICATION OF ERIC USERS BY OUTSIDE PROFESSIONAL RESPONSIBILITIES AND ACADEMIC DEGREE

Academic Degree	Yes	No	(N)
High School Diploma	10.5%	88.5%	100% (19)
Bachelor's	15.9	84.1	100% (145)
Master's	59.0	41.0	100% (212)
Specialist's	22.2	77.8	100% (9)
Doctorate	56.2	43.8	100% (48)
Other	42.8	57.2	100% (7)
Overall	33.9	66.1	100% (440)

Source: Individual User Questionnaire

TABLE 3DD

CLASSIFICATION OF ERIC USERS BY OUTSIDE RESPONSIBILITIES AND USERS BY AGE AND SEX

	Yes	No	(N)
Age			
25 or below	17.0	83.0	100% (106)
26-35	31.6	68.4	100% (168)
36-45	60.4	39.8	100% (106)
46-55	44.1	55.9	100% (59)
56-65	83.3	16.7	100% (12)
Over 65	----	----	---- (3)*
Overall	33.3	66.7	100% (454)
Sex			
Male	43.1	56.9	100% (195)
Female	26.1	73.9	100% (241)

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted

TABLE 3EE

CLASSIFICATION OF ERIC USERS BY OUTSIDE PROFESSIONAL RESPONSIBILITIES

	Percent	(N)
Yes	31.0	304
No	61.5	304
No Response	7.5	37
	100.0	494

Source: Individual User Questionnaire

TABLE 3FF

PRIMARY ASSOCIATION OF INDIVIDUAL USER RESPONDENT

Primary Association	%	(N)
Pre-School	1.4	7
Elementary School	13.2	65
Secondary School	7.1	35
College or University	45.3	224
State Dept. of Education	2.8	14
Regional Educational Laboratory	5.7	28
Research and Development Center	2.6	13
Professional Organization	.6	3
Office of Educational Regional Office	.8	4
Other Federal Agency	1.8	9
Local or Regional Information Center	.4	2
Business or Industry	.2	1
Other	9.9	49
No Response	8.2	49
	100.0%	494

Source: Individual User Questionnaire

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section A

Documents Acquired and Processed

Chapter 4

Section A

DOCUMENTS ACQUIRED AND PROCESSED

Making documents available requires, first, that they be identified, located, and then physically acquired. Second, decisions must be made regarding their quality, significance, or relevance to education. Third, documents selected for dissemination must be processed; this step includes recording identifying information about the document (cataloging it), preparing an abstract, assigning index terms, and transferring all of this information to computer storage. Fourth, this information about the document must be announced to potential users by some effective means, e.g. through a bulletin such as Research in Education. Finally, the entire document must be reproduced for delivery upon demand.

The material presented in this chapter has been organized to demonstrate the extent to which ERIC is meeting its first objective; to make significant but previously unavailable documents easily available to the educational community.

Prior to the development of ERIC, over 1500 reports representing over 75 million dollars worth of R & D investments had been received by the Office of Education. Unfortunately, though, copies of most were extremely difficult to obtain, if not completely unavailable. Copies received were made available as long as they lasted; some were lost or discarded in office moves. The same was true of many important papers presented at conferences and reports released by university research centers, foundations, professional organizations, state and local agencies, and other educational groups. Much current, significant, and useful information circulated among various "in-groups," or "invisible colleges" of specialists, but much of this information was never available to large segments of the educational community; little information filtered out from the original researchers to educators, decisions-makers, and practitioners.

In order to accomplish its first goal, ERIC developed a three-part strategy:

> Establishing clearinghouses where there already were impressive collections of documents or where work groups had demonstrated their potential for acquiring appropriate reports in a given field or topical area of education.
>
> Developing a centralized acquisition effort through Central ERIC for collecting documents from government agencies and other large producers of educational reports, such as NEA or state educational agencies.
>
> Finally, encouraging clearinghouses to develop complementary networks for acquiring documents from the many diverse but smaller-scale producers of reports such as individuals at colleges and universities, research centers, and various groups with which the clearinghouse directors have recurring relationships.[1]

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[1] Material in this section draws on Lee G. Burchinal, "Development of ERIC; June 1968," Washington, Office of Education, 1968, pp. 8-9.

Review of Document Selection Criteria of ERIC Clearinghouses

Basic to an evaluation of RIE and the ERIC document dissemination program is identification of selection criteria employed by the clearinghouses. The relevance and quality of input, of course, strongly affect the degree of user satisfaction and the impact on users of ERIC services and products.

At the request of members of the ERIC Advisory Panels for information on how documents are selected either for accession into the ERIC system or retention in clearinghouse collection, an assessment was undertaken of the document-selection criteria prepared and followed by the twenty ERIC clearinghouses. Although criteria varies from clearinghouse to clearinghouse a high degree of uniformity exists. For purposes of review, specific selection criteria have been clustered under general headings, which appear frequently across all the responses. The following list illustrates the principal elements which guide ERIC clearinghouses in their document evaluation and selection.

Scope or Relevance

Does the document concern the field of interest of the clearinghouse in question?

Is the document of local interest that cannot be generalized?

Is it concerned with emerging interests and trends?

Is the document concerned with knowledge from other disciplines which is applicable to the field?

Significance or Impact

Does the document provide impetus for further research or action?

Can the document serve as a guide for persons and organizations in similar situations?

Does it suggest new areas of research or present new hypotheses?

Does it help organize some topic area?

Does it serve as a significant record of a field's historical development?

Research Design and Methodology

Is the nature of the design appropriate?

Is the sampling procedure fitting?

Are the conclusions valid and the data reliable?

Can the study be replicated?

Are the implications generalized?

Innovativeness or Uniqueness

Does the document present a new treatment, idea, or application?

Does it describe an old treatment, idea, or application in a new framework?

Does it employ newly discovered data or new data-gathering instruments?

Does it offer a fresh viewpoint or a substantial and comprehensive summary of current viewpoints?

Timeliness or Recency

Has this document been written since 1966?

If written between 1966 and 1970, is it of outstanding importance?

If written before 1960, can it be termed a "landmark" study?

Reader Interest or Requests

Does this document meet the interest and needs of given audience target areas as evidenced by frequently repeated demands from users?

Presentation Style and Format

Is the topic presented with clarity, vigor, and in particularly meaningful terms?

Does the document contain high information content per page?

Is the description thorough? Methodology explicit? References included? Are adequate figures and tables included?

Is the document form adequate to be reporduced via HC or MF?

Is re-typing warranted by the outstanding quality of the content?

Availability or Accessibility

It is assumed that much good material remains unpublished or published only locally with limited distribution.

ERIC exists to make high quality material widely available as soon as possible.

Topic or Source Priority

Some authors and some sponsoring organizations have so consistly contributed to the field that anything they produce merits attention.

Bureau of Research Reports from OE are included.

"Must Expedite" documents deemed important by Central ERIC are included.

It should be noted also that, even given these strict criteria, each learinghouse is also limited by informal agreement with Central ERIC (but sometimes waived) to a total of approximately fifty documents added each month. Clearly the emphasis is on strict application of criteria to obtain material of high quality for eventual inclusion in ERIC.

General Growth in Document Collection and Indexes

The success of ERIC's basic strategy is clearly reflected in Table 4A.1. The total size of the ERIC collection has grown from an initial 1,746 documents (Catalog of Selected Documents on the Disadvantaged) in 1965 to 95,400 projected by the end of 1971.

Figure 4A.2 shows the total number of documents received, solicited and unsolicited. From January, 1969, to June, 1971, the number of solicited and unsolicited documents received by clearinghouses was relatively constant. The lowest combined total occurred during the period July-December, 1969, when slightly over 14,000 documents were received. The record of document acquisitions indicates that the clearinghouses processed an increasing number of solicited documents over the period 1969-71 compared to the number of unsolicited. This trend is noticeable over the entire period, and the transition to a higher proportion of solicited rather than unsolicited documents occurred early in 1970. This relative, proportional index is accompanied by a decreasing absolute number of unsolicited documents. It would appear that after initial start-up ERIC clearinghouses became increasingly more adept at solicitation of specific materials after an initial spurt of unsolicited materials in the early stages of the development of ERIC.

The number of documents processed for RIE and local files is shown in Figure 4A.3. There was a steady but small (under 1000 processed documents) growth in the number of documents processed for RIE over the entire period from January, 1969, to June, 1971. This seems reasonable in light of input restrictions for clearinghouse processing established by Central ERIC. This trend was affected by a minor regression during July-December, 1969. Concurrently, the number of documents processed for local files was almost identical to the number processed for RIE during the first year and a half. After June of 1970, however, there was a noticeably sharp decrease in number of documents processed for local files.[2] This trend, ending with the last data collected, shows a decrease of two-thirds in the number of documents processed for local files. The combined data in this table show a decrease in the overall number of documents processed for RIE and for local files while representing a decrease in unsolicited documents and an increase in solicited documents.

With respect to the number of journal articles indexed in CIJE (see Figure 4A.4), there is a marked, constantly increasing number of journal articles indexed over the time period January, 1969, to June, 1971. The total number of indexed articles doubled (from approximately 3500 to over 7000) during this period, showing a substantial growth in identification of relevant journal articles.

In sum, these four figures (4A.1-4) have provided the following information:

Substantial growth in ERIC's total collection.

A trend toward more solicited than unsolicited documents between July, 1969, and June, 1971.

A constant and slightly increasing number of documents processed for RIE accompanied by a sharp decline in the number of documents processed for local files.

A sharp increase in the number of journal articles indexed during the overall period.

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[2] OE has since discouraged the maintenance of local files.

It was suggested in 1968[3] that Central ERIC and clearinghouse acquisition efforts were expected to net up to 24,000 unpublished documents annually. Clearly the ERIC system has met that goal.

The site interviewers asked their informants whether or not they felt ERIC was fulfilling the task of making documents available to educators and researchers. One clearinghouse respondent thought ERIC was more an archive than a used collection; one reason given for this belief was the apparent limitation to research documents. Several respondents expressed the need for an index which included a wider range of resource materials than unpublished research documents. Others felt the need for including pertinent, if somewhat older, documents. Other respondents pointed out the difficulty and delay in getting material from EDRS (a comment also made by panelists). Many cited documents were found to be unavailable, and some respondents could not understand why such documents continue to be listed in *RIE*. Other respondents suggested that *RIE* as the principal announcement mechanism is frequently not readily available to users with the result that ERIC documents listed therein are not easily available.

In summary, site visits produced three primary reasons for perceived lack of use of documents.

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[3] Lee G. Burchinal, "Evaluation of ERIC, 1968," Washington, HEW, October, 1968. (ED 020 449)

1. Lack of awareness of ERIC and its function.
2. Too many materials of low quality and low utility included.
3. Lack of availability of some listed materials.

The figures presented above were drawn from clearinghouse quarterly records. The information indicates that the system _per se_ is working as intended: documents from many sources are being acquired, screened, selected, announced, reproduced, and made available. The site data, however, indicated some question about whether or not availability also leads to effective use. Answering this question is, of course, a principal objective of this study. The sections which follow draw largely on the questionnaire survey of indivdual users and indicates respondents' employment of and satisfaction with various parts of the ERIC system.

TABLE 4A.1

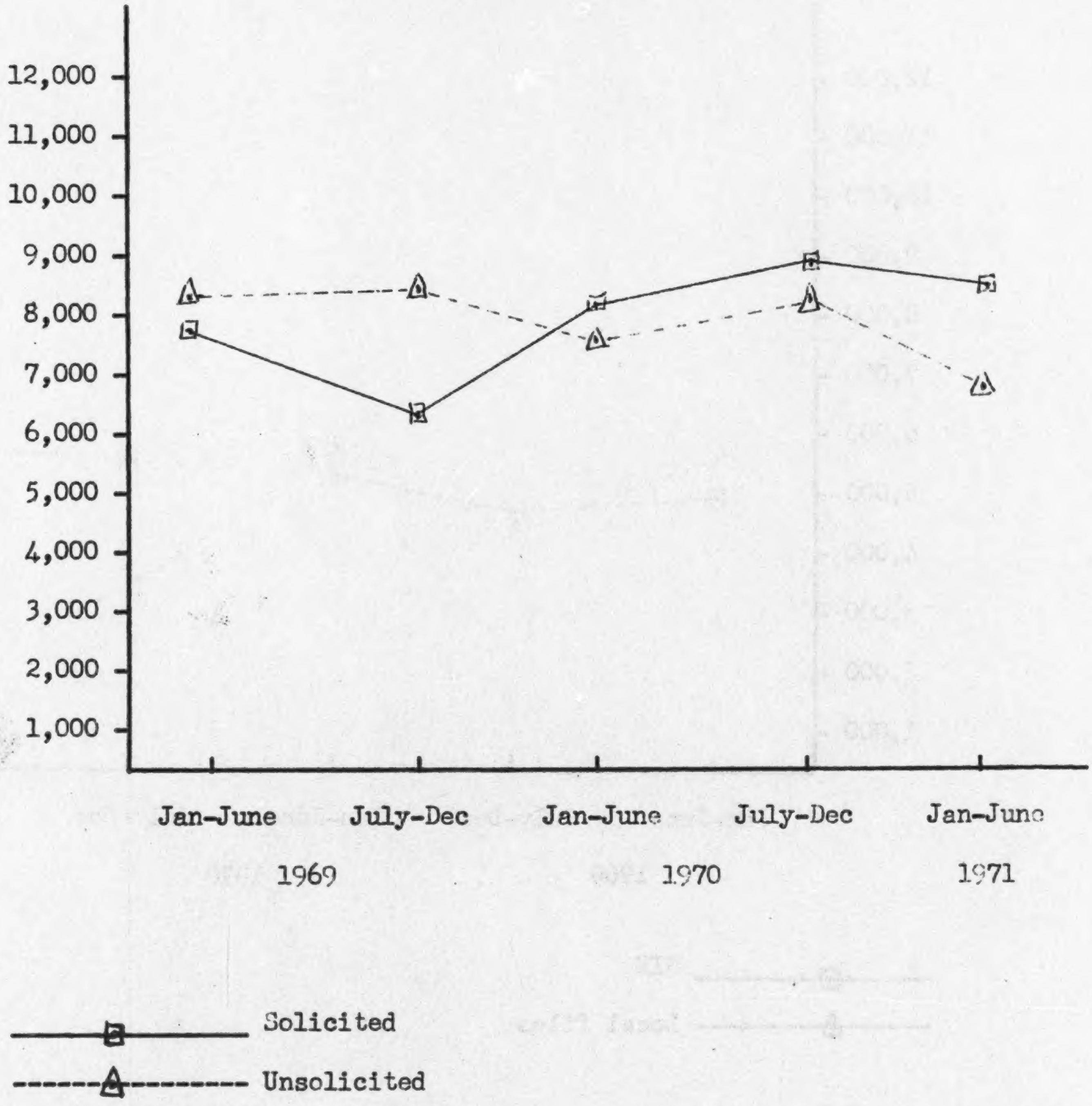
GROWTH IN TOTAL DOCUMENTS IN COLLECTION

	1965	1966	1967	1968	1969	1970	1971*	Total
RIE	----	94	2255	8803	10453	10457	12370	44,432
Pacesetters	----	----	1075	906	572	45	----	2,598
Disadvantaged	----	----	1746	----	----	----	----	1,746
Manpower	----	----	----	392	316	332	----	1,040
CIJE	----	----	----	----	11707	15892	16730	44,329
Other	1000	1214	----	----	----	----	----	2,214
Total	1000	1308	5076	10101	23048	26726	29100	96,359

Source: Clearinghouse Quarterly Reports.
* Estimated

Figure 4A.2

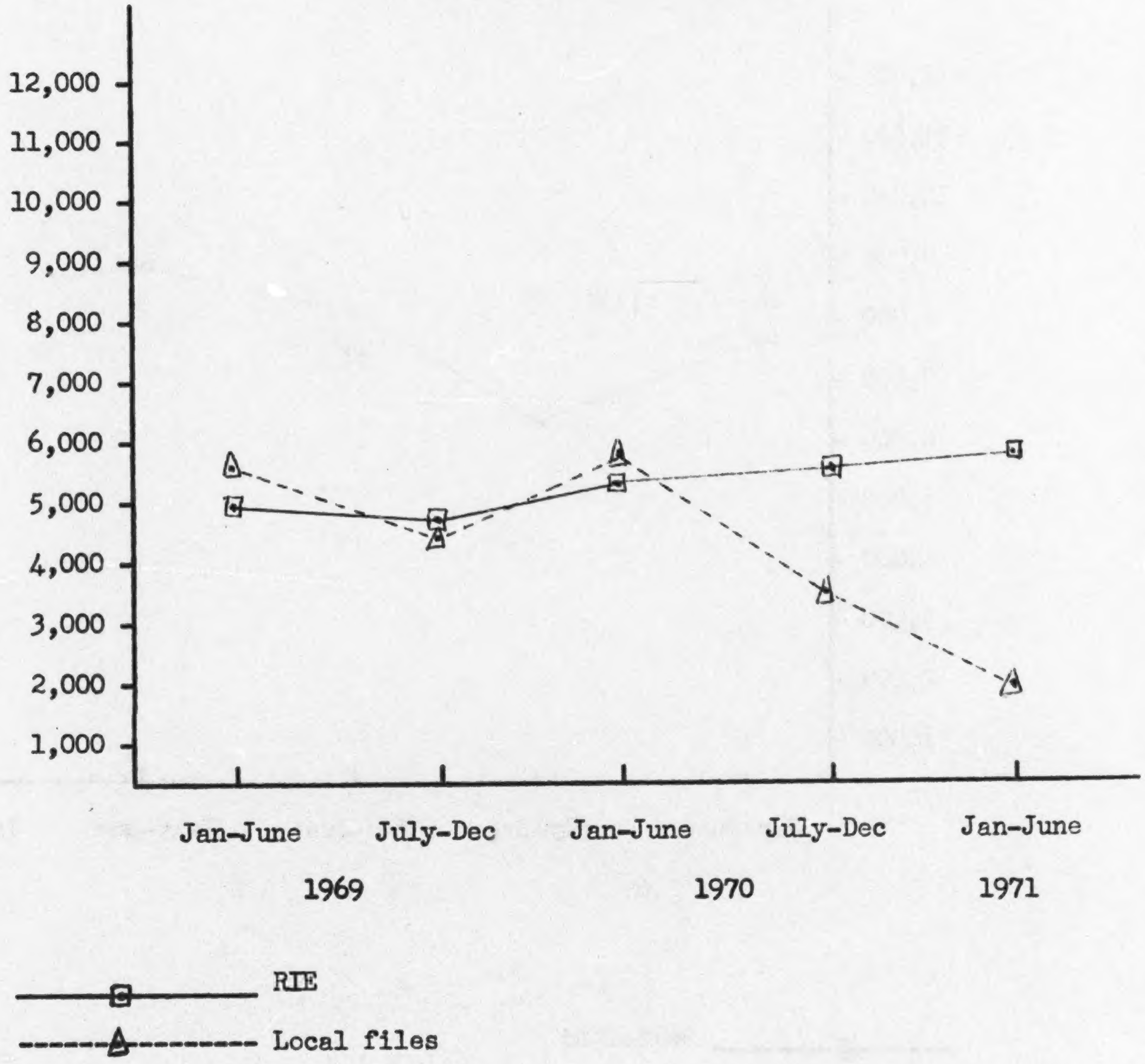
NUMBER OF DOCUMENTS RECEIVED BY CLEARINGHOUSES
Solicited and Unsolicited



Source: Clearinghouse Quarterly Reports

Figure 4A.3

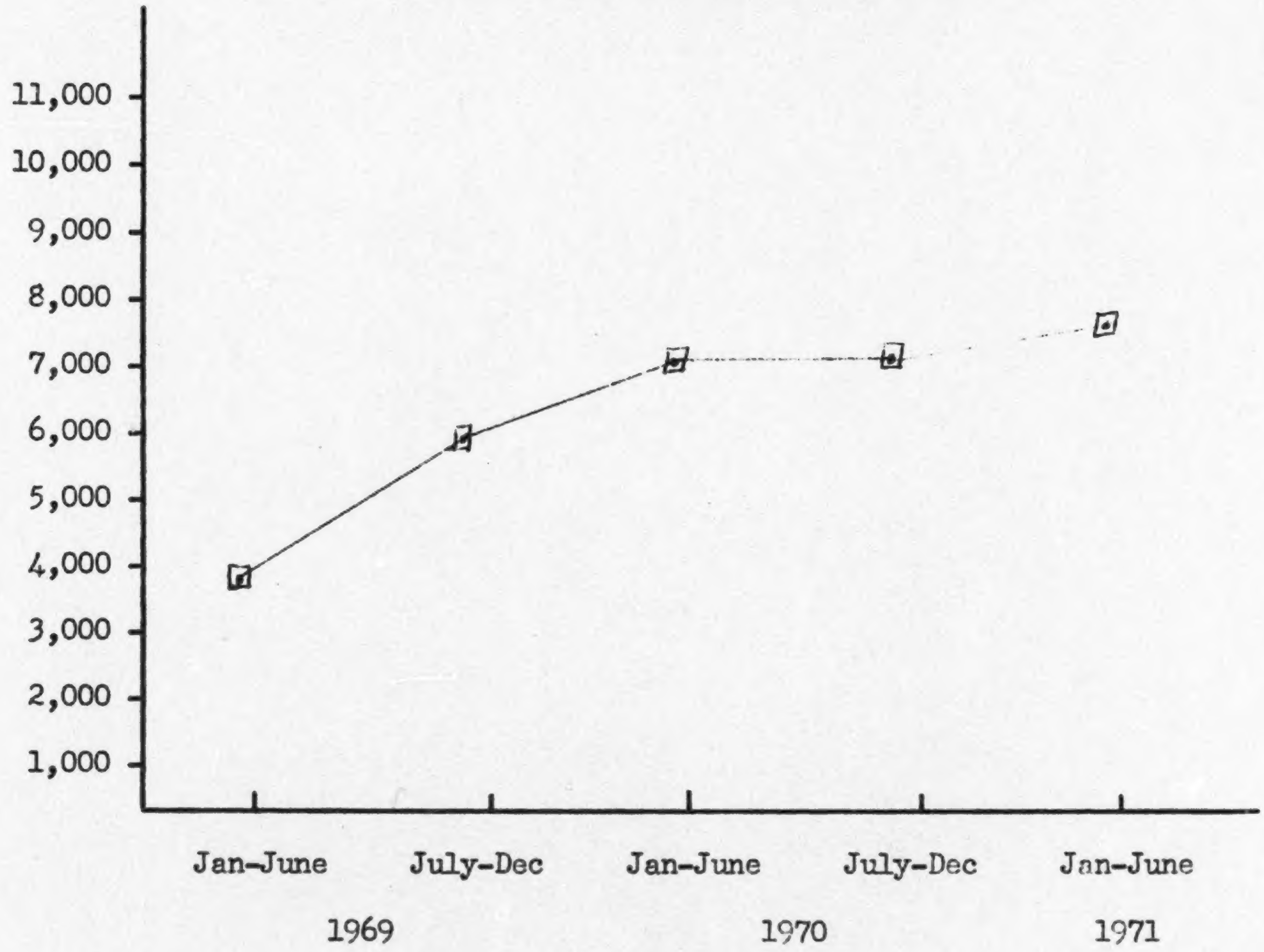
NUMBER OF DOCUMENTS PROCESSED
FOR RIE AND FOR LOCAL FILES



Source: Clearinghouse Quarterly Reports

Figure 4A.4

NUMBER OF JOURNAL ARTICLES INDEXED IN CURRENT INDEX TO JOURNALS IN EDUCATION



Source: Clearinghouse Quarterly Reports

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section B

Microfiche and Hard Copy

Section B

MICROFICHE AND HARD COPY

Microfiche and hard copy are the forms in which ERIC documents are made available to the public. A Microfiche (MF) is a 4"x6" sheet of microfilm on which up to 70 pages of text are reproduced. This form of reproduction is widely used among Federal agencies distributing research and other reports. Hard copy (HC) refers to reproduction of the document on paper at the original size. The basic cost of microfiche is $0.65 for individual documents regardless of size. For hard copy, there is a pricing schedule beginning at $3.29 for the first 100 pages with step increases of the same amount for each additional 100 pages.

Monthly standing orders for microfiche copies of all ERIC reports announced in each issue of Research in Education (RIE) average $120 per month, at the reduced rate of $0.089 per microfiche. Complete microfiche orders for the special collections are also available at cost savings.

The data presented heretofore pertain to acquisition of documents for the ERIC system. Data on distribution of microfiche and hard copy, by contrast provide some measure of basic use of and satisfaction with the principal products of the ERIC system. Tables 4B.1 and 4B.2, drawn from EDRS sales and distribution records, cross-tabulate sales of documents cited in RIE during various time periods with the various categories of purchasers.

The number of standing orders for ERIC microfiche showed over a 300% gain from June, 1968, to June, 1971. (Table 4B.1).

Higher education did the bulk of the ordering (around 70%) over the entire time period. Although local schools increased their collections in absolute numbers, their proportion of orders declined from 14% to 5%; similarly, state agencies increased their number of collections three-fold, but barely maintained their proportion of orders at 8%. Other agencies increased their overall orders by about 10% during this same period. These data correspond with other data (see Table 4C.2) which shows that the heaviest use of the Thesaurus with RIE was among people whose occupational positions were most likely in higher education or university settings.

Individual or "demand" orders for microfiche from EDRS (Table 4B.2) showed a substantial increase for 1970 over the previous year. This one-year period accounted for a growth in microfiche orders of over 50%. Over half of the total orders continued to come from higher educational institutions, with an increase of 42% in 1970 over 1969. Local schools, (with 15,000) and individuals (with 6,000) accounted for the next highest total purchases of microfiche, with gains in 1970 of 36% and 72% respectively. Commerical organizations accounted for a significant increase of 124% on a base of 4,000 copies. State agencies (-6%) and the general public (-46%) were the only categories reporting a decline in 1970. It should be noted in both cases, however, the declines were registered against relatively small numerical totals. Similarly, the largest percent gain (486%) occurred in Regional Education Laboratories and

R & D Centers with a total purchase in 1970 of about 1100 microfiche. Finally, evidence of increasing foreign interest in U.S. educational developments was reflected in an increase of 129%, reaching 6,000 microfiche in 1970.

Table 4B.3 cross-tabulates user categories with frequency of microfiche use during 1970. Among individual ERIC users, microfich was heavily exploited. Over 80% of these persons reported using the microfiche capability at least 1-10 times per year. Further, 48% of respondent users took advantage of the system by using more than 11 microfiche titles during the year. The heaviest claimed use was by Research and Development Center personnel (90.2%) and by individual consultants (100%) who reported using at least 1-10 titles per year. Other occupational groups that used microfiche heavily were administration (90%) and teaching personnel (85.6%). Graduate (74.5%) and undergraduate (55%) students reported less frequent but still very substantial use of microfiche, Following the pattern that seems to occur frequentl with use of ERIC services, there was no statistically vaild difference in microfiche use between males and females. Those involved with current research (90%) tended to use microfiche more than those not so involved (76%). Finally, those who had published recently (92%) also tended to use microfiche more than non-publishing users (79%).

Table 4B.4 estimates, for the various educational organizations, the average number of people who used microfiche in a typical week. Given that researchers and professional persons involved in publishing are heavy users of microfiche (Table 4B.3) it follows (see Table 4B.4) that the number of people who are estimated to use microfiche each week at colleges and universities is far greater than that in any other organization, since most educational research and authorship takes place among university faculty. It should be noted as well that the simple concentration of people at a single college campus is very high; thus the potential number of ERIC users is increased by population alone. Regional Educational Laboratories and R & D Centers generally have some close contact with a university campus, thereby having the university's influence to increase its number of users as well. These data most likely reflect this simple demographic fact of life.

Other data in this table tend to conflict with some of the earlier findings. Data in Table 4B.3 show that 90% and 85% of administrators and teachers respectively use microfiche heavily during the year. However, Table 4B.4 estimates that only 2.8 people per week tend to use microfiche at a secondary school, and only 9.8 of state department personnel (some of whom must be classified administrators) use it. (A cautionary note: Table 4B.3 reflects a broad sample of individual users with a sizeable representation of administrators and teachers (150), whereas the organization sample included no elementary and only 2 secondary schools reporting estimates).

Table 4B.5 cross-classifies users by occupation with the purpose for which they used microfiche. The four heaviest classes of users (see Table 4B.3) had a variety of purposes for using microfiche. Administrators used it first for research projects, second for keeping abreast in their fields. They also used it heavily for assignments and term papers (presumably for work on advanced degrees) and for program improvement. Teachers reported frequent use of microfiche for research projects, assignments and term papers, keeping abreast in a field, and speech, report, article preparation in that order. R & D personnel again used it primarily for research but also to keep abreast in their fields. Finally, consultants used microfiche for curriculum development first, and equally as much for program improvement and speech or article preparation second. As might be expected, overall, those reporting having conducted research used microfiche more heavily than non-research respondents.

Table 4B.6 evaluates microfiche in terms of its usefulness. Overall it can be seen that, of those who have used microfiche, only a small percentage found it of little value (.5%). The research and publication variables do not produce any significant distinctions in usefulness rating among users although, as has been shown before (Table 4B.3), researchers and publishers actually use it more than non-researchers and non-publishers. Across occupations, if we exclude one category where N < 5, users overall found the microfiche capability very useful (62.5%). Obviously, if we excluded the percentage which indicated "Never used," judgments on usefulness by actual microfiche users would be even stronger.

Naturally, one cannot use microfiche without the equipment necessary to read it. Therefore, the organization questionnaire requests information on whether those organizations providing ERIC products and services had microfiche readers, printers, duplicators or portable readers and, if so, how many. That data is cross-tabulated in Table 4B.7. It would be reasonable to expect that those organizations having the most equipment available would have the heaviest microfiche usage. By comparing the data in Table 4B.4 with Table 4B.7, we can see that, by and large, this expectation is borne out, i.e., universities and R & D Centers have the largest amount of equipment available and make the most use of it. There are, however, some exceptions: state departments of education, local and regional information centers and other Federal organizations all have a high relative proportion of equipment but with relatively low per week usage rates. Clearly the availability of equipment has not produced heavy use by the personnel in these organizations. Although the secondary school recorded the lowest relative amount of equipment, individual user respondents identifying themselves as elementary and secondary school personnel (85 in sample) reported 88% had accessibility to microfiche readers. Of the 12% lacking such accessibility, 90% reported they would use readers if available.

All catagories of users responding on individual user questionnaires (see Table 4B.8) were asked whether they had a microfiche reader readily available to them. Overall 73% of ERIC users reported a microfiche reader easily accessible. Those who did not (5%) were asked whether they would use microfiche if a reader were more accessible to them. A strong percentage (87%) responded that indeed they would. (non-respondents account for 22%)

The educators and information service managers of the ERIC Advisory Panels had numerous observations to make about microfiche use. Comments directly related to the fiche indicated that quality has been erratic; that fiche related to one document should be connected and provided in a "multiple fiche" envelope. Several indicated need for more computer research potential. Some felt it would be helpful if Clearinghouses could sell microfiche.

A consistent theme of the Panel meetings was the need for more, better, and less expensive hardware--readers and reader printers, etc. These comments reinforce the user preferences indicated in Table 4B.8.

Hard Copy

Similar data was collected on the use of hard copy. Table 4B.10, taken from EDRS sales orders, shows the number of hard copy units sold through other than standing order channels, in 1969 and 1970, cross-classified by purchasing organizations. Growtl in non-standing orders of ERIC microfiche was shown in Table 4B.2 above, indicating an overall growth rate of 51%. During the same period individual orders for hard copy documents increased 34% (Table 4B.10).

Table 4B.11, developed from data collected through the individual user questionnaire, cross-tabulates the frequency of use of hard copy during 1970 with the primary association to which respondents belong. Hard copy clearly has a different user population than does microfiche. Users listing secondary schools as their primary association reported using hard copy less frequently than microfiche, with 1970 use of 1-10 or more of hard copy (53%) and microfiche (78%). More frequent users of hard copy were State Department of Education (62%) and Regional Educational Laboratories (63%). In Contrast users at colleges and universities reported only 46% frequency use of hard copy.

Tables 4B.12, 4B.13, and 4B.14 were also drawn from data gathered through the questionnaire to individual users. 4B.12 cross-classifies frequency of hard copy use as clearly not as high as that of microfiche (compare Tables 4B.3 and 4B.12). Generally, slightly more than half of ERIC users use hard copy where over 80% use microfiche. Among the users of hard copy it can be seen that R & D personnel, teachers and administrators are the most frequent users. Students, both graduate and undergraduate, by contrast, are the most infrequent users. Again we find little distinction among male and female users, and, in keeping with trends over the entire ERIC system, we find more use among researchers and authors. The overall data in this table suggest that hard copy is not as widely used as microfiche. Interpretation of this frequency of use data should take into account the large files of standing order microfiche available to users in a majority of the centers studied, as contrasted to a typically smaller number of hard copy documents purchased individually by the centers at much greater expense per copy. Refer to first paragraph in this section for relative costs of microfiche and hard copy.

Table 4B.14 cross-classifies users with the degree to which they find hard copy userful. The responses shown in this table are only moderately positive. Further, only half of respondents have actually used hard copy. Hence, this finding is only a weak indication of positive evaluation at best.

The general trend in which researchers find ERIC products more useful than non-researchers is true for hard copy as well. Likewise, those who publish find hard copy more useful than non-publishers.

Table 4B.15 presents data on the change in microfiche/hard copy use ratio. This data is drawn from EDRS sales and distribution records. The data in Tables 4B.12-4B.14 have provided evidence that hard copy documents have not been used as frequently as microfiche. Table 4B.15 further emphasizes the relative popularity of microfiche over hard copy. Of the ten specific organizations listed, six placed more individual orders for hard copy than microfiche during 1969. In 1970, however, only three organization groups ordered more hard copy than microfiche.

In sum, these data simply reflect the increasing use of microfiche over hard copy documents, a trend that is confirmed in individual user data in this section.

TABLE 4B.1

STANDING ORDERS* FOR ALL DOCUMENTS CITED IN RIE

	June, 1968		June, 1971	
Type of Institution	No.	%	No.	%
Higher Education	87	71.5	281	70.0
Local Schools	17	13.9	20	5.0
State Agencies	9	7.3	31	7.7
Other	9	7.3	70**	17.3
Total	122	100.0	402	100.0

Source: EDRS Sales and Distribution Records

* USOE and privately supported ERIC microfiche collections. A listing of such collections is included in Chapter 3, Volume III.

** Includes:

	(N)	%
Foreign	21	5.3%
Prof. Org.	11	2.7
Federal	13	3.2
Reg. Labs	11	2.7
Other	14	3.4

TABLE 4B.2

INDIVIDUAL ORDERS FOR MICROFICHE
Units Sold

Purchasing Organization	1969 Jan-June	1969 July-Dec	1970 Jan-June	1970 July-Dec	Percent Change 1969-1970
Higher Education	12,237	16,538	19,635	21,189	+41.9
Local Schools	5,070	5,705	9,165	5,502	+36.1
Individuals	1,943	1,699	2,933	3,312	+71.5
Commercial Orgs.	856	808	1,168	2,556	+123.8
Foreign	1,279	1.769	2,966	3,895	+129.1
Prof. Asso. & Found.	215	87	399	206	+100.3
State Agencies	931	324	844	336	-6.0
Federal	261	210	1,042	807	+292.6
Non-Profit	297	683	252	228	-51.0
REL's and R & D Cent.	62	132	495	641	+485.6
All Other	413	568	777	747	+55.3
All Other Public	146	482	38	301	-46.0
Overall	23,710	29,005	39,714	39,720	+50.69

Source: EDRS Sales and Distribution Records

TABLE 4B.3

FREQUENCY OF MICROFICHE USE DURING 1970

	Never	1-10 titles/yr.	11+ titles/yr.	N
Occupation				
Administration	10.0%	30.0%	60.0%	100%(50)
Teaching	14.4	45.4	40.2	100%(97)
Pupil Pers. Serv.	--	--	--	-- (4)*
R & D	9.8	12.2	78.0	100%(41)
Library	16.1	35.7	48.2	100%(56)
Consulting	0.0	30.8	69.2	100%(13)
Undergraduate	45.0	40.0	15.0	100%(20)
Graduate	25.6	31.6	42.9	100%(133)
Other	5.0	45.0	50.0	100%(20)
Overall	17.7	33.9	48.4	100%(434)**
Sex				
Male	14.5	29.5	56.0	100%(193)
Female	20.9	36.8	42.3	100%(234)**
Conducted Research				
Yes	9.9	33.1	56.9	100%(181)
No	24.2	31.3	44.5	100%(227)**
Published				
Yes	7.8	32.2	60.0	100%(115)
No	20.8	34.0	45.2	100%(312)**

Source: Individual User Questionnaire
*Where N< 5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4B.4

ESTIMATED NUMBER OF PEOPLE USING MICROFICHE IN A TYPICAL WEEK AT TYPES OF ORGANIZATIONS

Organization	Mean Number of Users	Number of Reporting Organization
Secondary School	2.8	2
College or University	48.5	64
State Dept. of Ed.	9.8	31
Reg. Ed. Laboratory	12.8	13
R & D Center	18.3	6
Professional Org.	2.8	4
Office of Ed. Reg. Office	5.2	6
Other Federal Agencies	10.6	5
Local or Reg. Info. Center	7.2	5
Business or Industry	1.2	7
Other	4.8	25
	23.3	168

Source: Organization Questionnaire

TABLE 4B.5

PURPOSES FOR WHICH MICROFICHE IS USED

Microfiche Used For: Occupation	Keeping abreast in a field	Assignments and term papers	Updating of course bibliographies	Curriculum development	Program Improvement	Speech, report, article preparation	Research Project	Browsing	Other	(N)
Administration	31.5%	28.3%	5.7%	25.9%	27.8%	25.9%	35.8%	16.7%	5.7%	(54)
Teaching	27.0	36.3	9.9	18.8	14.0	24.0	37.6	16.2	1.0	(100)
Pupil Pers. Serv.	--	--	--	--	--	--	--	--	--	(4)*
R & D	24.4	8.9	15.6	20.0	15.2	13.0	37.0	10.9	2.2	(46)
Library	18.6	30.5	20.3	11.9	8.5	25.4	33.9	13.6	13.6	(59)
Consulting	25.0	6.3	18.7	43.8	31.3	31.3	6.3	18.7	6.3	(16)
Undergraduate	4.2	16.7	0.0	0.0	0.0	8.3	12.5	8.3	0.0	(24)
Graduate	13.9	40.4	8.1	5.1	4.4	19.0	32.8	12.4	2.2	(137)
Other	31.8	18.2	4.5	13.6	22.7	9.1	59.1	13.6	9.1	(22)
Overall	21.0	30.4	10.2	14.3	12.3	20.6	34.2	13.7	4.1	(462)**
Conducted Research										
Yes	23.3	30.3	14.9	16.5	13.7	20.0	42.1	18.0	3.2	(190)
No	19.0	29.2	7.2	12.6	11.4	19.0	26.2	10.1	5.5	(237)**
Published										
Yes	26.1	21.8	14.3	12.4	18.3	19.0	15.1	33.3	4.8	(120)
No	19.6	32.3	8.8	19.3	10.3	25.0	13.6	33.7	2.5	(331)

Source: Individual User Questionnaire

* Where N<5, calculations have been omitted.

** Totals differ because response rates differed.

TABLE 4B.6

EVALUATION OF MICROFICHE
(In percentages)

	Very Useful 1	2	3	4	No Use 5	Never Used 6		(N)
Occupation								
Administration	68.1%	14.9%	4.3%	8.5%	0.0%	4.3%	100%	(47)
Teaching	58.9	12.2	12.2	4.4	0.0	12.2	100%	(90)
Pupil Pers. Serv.	--	--	--	--	--	--	--	(4)*
R & D	67.4	19.6	4.3	4.3	0.0	4.3	100%	(46)
Library	64.9	15.8	8.8	1.8	0.0	8.8	100%	(57)
Consulting	78.6	0.0	21.4	0.0	0.0	0.0	100%	(14)
Undergraduate	61.1	5.6	0.0	0.0	5.6	27.8	100%	(18)
Graduate	58.5	15.4	3.3	1.6	0.0	21.1	100%	(123)
Other	66.7	14.3	9.5	4.8	4.8	0.0	100%	(21)
Overall	62.5	14.0	7.4	3.3	0.5	12.1	100%	(420)**
Conducted Research								
Yes	61.5	18.1	8.8	2.7	0.0	8.8	100%	(182)
No	64.3	11.4	4.3	3.5	0.5	15.7	100%	(210)**
Published								
Yes	60.5	17.5	11.4	4.4	0.0	6.1	100%	(114)
No	63.4	13.2	5.3	3.3	0.3	14.5	100%	(303)**
Organizations	64.1	16.9	6.6	4.1	0.0	8.2	100%	(195)

Sources: Individual and Organization Questionnaires
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4B.7

MICROFICHE EQUIPMENT AVAILABLE

Organization	Readers	Printers	Duplicators	Portable Readers
	$\overline{X}$	$\overline{X}$	$\overline{X}$	$\overline{X}$
Secondary School	1.3	.5	0	0
College or University	3.1	.5	.1	.4
State Dept. of Education	1.8	1.0	.3	1.3
Reg. Ed. Lab.	1.8	.9	.1	.4
R & D Center	2.2	.8	.2	1.9
Professional Org.	1.2	.7	.2	.3
OE Regional Office	1.5	.8	0	.2
Other Federal	1.9	.5	.1	.9
Local or Reg. Info. Cent.	2.0	.7	.3	.7
Business or Industry	1.0	.3	.3	.4
Other	.9	.4	.1	.3
$\overline{X}_{..}$ =	2.1	.6	.1	.6

Source: Organizational Questionnaire

TABLE 4B.8

MICROFICHE READER EASILY ACCESSIBLE

Yes	No	No Response		(N)
72.9%	5.3%	21.1%	100%	(494)

If NO, Would Use if More Accessible

Yes	No
87.5%	12.5%

N = 32

Source: Individual User Questionnaire

TABLE 4B.10

INDIVIDUAL ORDERS FOR HARD COPY DOCUMENTS
Units Sold

Purchasing Organization	1969		1970		Percent Change 1969-1970
	Jan-June	July-Dec	Jan-June	July-Dec	
Higher Education	9,969	8,149	10,716	12,763	+29.6
Local Schools	5,159	3,189	6,421	6,203	+51.2
Individuals	2,733	1,820	3,625	4,325	+74.6
Commercial Orgs.	1,722	1,732	1,514	1,606	-9.6
Foreign	1,513	2,121	2,937	2,806	+58.0
Prof. Assoc. & Found.	371	296	308	480	+18.1
State Agencies	864	327	460	325	-34.1
Federal	368	285	557	594	-76.3
Non-Profit Orgs.	552	531	274	418	-36.1
REL's and R & D Cent.	127	308	203	158	-17.0
All Other	274	416	118	908	+48.7
All Other Public	611	521	638	578	+7.4
Overall	24,263	19,695	27,771	31,164	+34.1

Source: EDRS and Distribution Records

TABLE 4B.11

NUMBER OF ERIC HARD COPY DOCUMENTS USED DURING 1970 BY RESPONDENTS' PRIMARY ASSOCIATION

Primary Association	None	1-10	11-25	More Than 25	N
Preschool	57.1%	42.9%	0.0%	0.0%	100% (5)
Elementary	55.2	39.7	3.4	1.7	100% (58)
Secondary	47.1	44.1	2.9	5.9	100% (34)
College or University	54.0	35.2	7.5	3.3	100% (213)
State Department of Education	38.5	46.2	15.4	0.0	100% (13)
Regional Educational Laboratory	37.0	37.0	14.8	11.1	100% (27)
Research and Development Center	53.8	30.8	7.7	7.7	100% (13)
Professional Organization	---	----	---	---	--- (1)*
Office of Education Regional Office	---	---	---	---	--- (4)*
Other Federal Agency	75.0	12.5	0.0	12.5	100% (8)
Local or Regional Information Center	---	---	---	---	--- (2)*
Business or Industry	---	---	----	---	--- (1)*
Other	58.7	30.4	6.5	4.3	100% (46)
Overall	52.9	36.1	7.0	4.0	100% (427)

Source: Individual User Questionnaire

*Where N<5, calculations have been omitted.

TABLE 4B.12

FREQUENCY OF HARD COPY USE DURING 1970

	Never	1-10 documents	11+ documents	(N)
Occupation				
Administration	45.8%	35.4%	18.7%	100%(48)
Teaching	45.3	45.3	9.5	100%(95)
Pupil Pers. Serv.	--	--	--	-- (4)*
R & D	39.1	41.3	19.6	100%(46)
Library	51.8	33.9	14.3	100%(56)
Consulting	46.2	38.5	15.4	100%(13)
Undergraduate	65.0	35.0	0.0	100%(20)
Graduate	65.2	29.5	5.3	100%(132)
Other	70.0	30.0	0.0	100%(20)
Overall	53.7	35.9	10.4	100%(434)**
Sex				
Male	52.3	37.6	10.2	100%(197)
Female	53.5	34.8	11.7	100%(230)**
Conducted Research				
Yes	42.2	42.2	15.7	100%(185)
No	61.4	30.9	7.6	100%(223)**
Published				
Yes	42.2	43.1	14.7	100%(116)
No	57.7	32.3	10.0	100%(310)**

Source: Individual User Questionnaire
*Where $N < 5$, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4B.13

MAIN PURPOSES FOR WHICH HARD COPY IS USED **

Hard Copy Used For: User's Occupation	Keeping Abreast in a Field	Assignments and Term Papers	Updating of Course Bibliographies	Curriculum Development	Program Improvement	Speech, Report, Article Preparation	Research Project	Browsing	Other	(N)
Administration	1.9	0.0	1.9	0.0	1.9	0.0	7.5	1.9	0.0	(53)
Teaching	6.0	6.9	4.0	4.0	4.0	6.0	5.9	5.1	1.0	(100)
Pupil Pers. Serv.	—	—	—	—	—	—	—	—	—	(4)*
R & D	4.4	0.0	2.2	4.4	6.5	4.3	6.5	2.2	0.0	(46)
Library	1.7	3.4	0.0	1.7	0.0	1.7	1.7	1.7	0.0	(59)
Consulting	6.3	0.0	0.0	0.0	12.5	0.0	6.3	0.0	0.0	(16)
Undergraduate	0.0	16.7	4.2	0.0	0.0	4.2	4.2	0.0	0.0	(24)
Graduate	5.8	6.6	0.7	0.7	2.2	2.9	1.5	3.6	0.0	(137)
Other	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(22)
Overall	4.6	4.8	1.7	1.7	2.8	3.2	4.1	3.6	0.2	(461)
Conducted Research										
Yes	5.3	7.4	3.2	3.2	4.7	7.4	5.3	4.8	0.0	(190)
No	4.2	5.6	1.3	1.3	0.8	0.8	3.4	2.1	0.4	(236)
Published										
Yes	5.0	4.2	4.2	4.2	5.0	6.7	5.9	7.5	0.0	(120)
No	4.2	5.4	1.2	1.5	2.4	2.7	2.1	3.0	.3	(330)

Source: Individual User Questionnaire.

* Where N<5. Calculations have been omitted.

TABLE 4B.14

EVALUATION OF HARD COPY

	Very Useful 1	2	3	4	No Use 5	Never Used 6		(N)
Occupation								
Administration	13.9%	11.1%	16.7%	16.7%	2.8%	38.9%	100%	(36)
Teaching	22.9	12.9	14.3	4.3	0.0	45.7	100%	(70)
Pupil Pers. Serv.	--	--	--	--	--	--	--	(3)*
R & D	21.6	13.5	13.5	8.1	5.4	37.8	100%	(37)
Library	17.4	8.7	26.1	8.7	0.0	39.1	100%	(46)
Consulting	11.1	22.2	0.0	11.1	0.0	55.6	100%	(9)
Undergraduate	13.3	6.7	6.7	0.0	6.7	66.7	100%	(15)
Graduate	20.9	14.5	5.5	2.7	1.8	54.5	100%	(110)
Other	9.1	9.1	0.0	0.0	18.2	63.6	100%	(11)
Overall	19.3	12.5	11.9	5.9	2.4	48.1	100%	(337)*
Conducted Research								
Yes	24.3	17.1	13.2	5.9	0.7	38.8	100%	(152)
No	16.0	8.9	12.4	5.9	3.0	53.8	100%	(169)*
Published								
Yes	22.7	16.5	13.4	6.2	3.1	38.1	100%	(97)
No	18.5	11.8	12.2	5.9	1.7	50.0	100%	(238)*
Organizations	24.6	16.0	21.9	10.2	0.5	26.8	100%	(187)

Sources: Individual and Organization Questionnaires
* Where N<5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4B.15

CHANGE IN MICROFICHE/HARD COPY RATIO
Individual Orders

	1969		1970	
	Jan-June	July-Dec	Jan-June	July-Dec
Higher Education	1.22	2.02	1.68	1.66
Local Schools	.98	1.49	1.29	.89
Individuals	.71	.94	.80	.77
Commercial Orgs.	.50	.46	.57	1.59
Foreign	.84	.83	.92	1.39
Prof. Asso. & Found.	.58	.29	.72	.43
State Agencies	1.07	.99	1.27	1.03
Federal	.70	.74	1.25	1.36
Non-Profit Orgs.	.54	1.28	.90	.55
REL's and R & D Cent.	.48	.42	1.08	4.06
All Other	1.50	1.36	1.26	.82
All Other Public	.24	.92	.80	.52
AVERAGE	.98	1.42	1.28	1.27

Source: EDRS Sales and Distribution Records

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section C

Thesaurus of ERIC Descriptors

Section C

THESAURUS OF ERIC DESCRIPTORS

The Thesaurus of ERIC Descriptors, now in its third edition, is used to index and enter documents into the ERIC system and to assist users in searching the system. It is a structured vocabulary of approximately 7,000 educational terms developed and brought up-to-date by educators who review the literature in their field. It is intended to give all educators not only insight into the ERIC system but also an increased awareness of the language of education. Further information about the Thesaurus can be found in the foreword to the 1970 edition by Dr. Frederick Goodman entitled "The Role and Function of a Thesaurus in Education."

The purpose of this study is to provide an overview of the people who have been using the ERIC Thesaurus, why and how they have been using it, and what they think of it. This user study does not attempt to assess the qualities and errors of the Thesaurus that can be measured independently of users, such as matters of internal design, development, and production of the Thesaurus.

The most frequent users of the Thesaurus appear to be persons in the "Library" and "Research and Development" categories, with graduate students and teachers as next heaviest users (Table 4C.1). Correspondingly, it can be noted that the least frequent Thesaurus users are administrators, undergraduates, and consultants. (Again, the small sample size for the "undergraduate" and "consultant" categories should be noted and those figures treated with caution.) Additional characteristics of Thesaurus users as a group are: (1) approximately a 10% greater proportion of male than female users; (2) a greater percentage of users with the doctorate and master's degrees; (3) a greater percent of people who have conducted recent research; (4) a greater percentage of people who have recently published works in their field.

In sum, it appears that, among individual user respondents, those using the Thesaurus can be generally characterized as people involved with library work or research and development activities who have recently done research, and have published or presented papers in the professional area in the past 5 years. The data also suggest that administrators and undergraduates use the ERIC Thesaurus least. This could mean that either the Thesaurus does not seem as helpful to these groups as it does to other groups or that use of this tool has not been adequately explained to potential administrative and undergraduate users.

Individual users were also asked (see Table 4C.2) whether they go initially to the Thesaurus when using RIE or CIJE. The question eliminated all persons not regularly using the Thesaurus. Overall, approximately the same percentage (13%) first go to the Thesaurus in conjunction with use of RIE and CIJE. Further, research activity does not distinguish significantly between these two groups although, in both cases, more people involved with research use the Thesaurus. The table also shows that more people who have published currently in their field use the Thesaurus. And, of those who publish, more consult CIJE than RIE by 6%. Those who have not published recently use *RIE* somewhat more often.

Occupationally, there seem to be specific preferences for initial utilization of the *Thesaurus* in conjunction with *RIE* or *CIJE*. Administrators and teachers appear to consult the *Thesaurus* most when using *CIJE*. On the other hand graduate students, undergraduate students, and R & D personnel tend to consult the Thesaurus most when using *RIE*. There seems to be little or no preference among library personnel who are *Thesaurus* users. These data suggest that there are only minor differences among users of *CIJE* or *RIE* in terms of initial utilization of the *Thesaurus*.

Users were also asked (Table 4C.3)how useful they considered the *Thesaurus*. Among those who actually use the ERIC *Thesaurus*, far more of both organizations (79%) and individual users (63%) find it useful than do not. Those involved with research activities apparently find it more useful than those not so involved, but there seems little difference in opinion about its usefulness among those who publish and those who do not--both seem to find the *Thesaurus* useful. Within occupational categories, however, opinions vary. Those who find the *Thesaurus* most useful are graduate students, library personnel, and R & D center personnel. This information suggests that the *Thesaurus* is found very useful by those who are continually involved with library search and accustomed to the technique of information search. Those not necessarily concerned with information search as a major occupational endeavor (administrators, teachers, consultants, undergraduates) still find the ERIC *Thesaurus* system useful, but not to the same degree as librarians.

The Advisory Panel discussants noted general user satisfaction with the Thesaurus. Other panel comments about the Thesaurus were: "Most useful when search goal is a subject which crosses lines (like creativity) or when the terminology is unspecific or colloquial and needs verification." "Very good, although lay terminology and Thesaurus terminology are not always compatible. Thesaurus, however, allows for broad cross-referencing." "Such use is mandatory when working with computer searching."

Data from the site visits revealed a wide variety of opinions. Clearinghouse respondents indicated considerable satisfaction although they indicate a need for more scope notes and a need for an identifier index. Other respondents at the sites were less happy with the Thesaurus. One information center indicated that its Thesaurus was little used. Another said that documents were six months behind, and that categories had too many descriptors while topics were identified by too few. Further, training people in use of Thesaurus is difficult; people can't just "walk in off the street" and use it.

A Reading Resource Center respondent remarked simply that "the Thesaurus is awful without training. People cannot translate their information needs into the terminology of the Thesaurus without some assistance during early or initial usage." A Regional Laboratory spokesman repeated this last criticism with respect to his own group. "ERIC needs a program training manual" which introduces potential users to the theory and practice behind the Thesaurus.

A respondent in a State Department of Public Instruction remarked that the problem is rather with the application of the Thesaurus than with the Thesaurus itself. "A document may be indexed under a given descriptor when there may actually be only a small amount, perhaps just a sentence, applicable to, or described by, that descriptor. The basic themes of the document as a whole-- or of its major sections or parts--should be emphasized, but not every single item." One respondent observed that a management decision was going to have to be made as to whether or not ERIC should be geared to public school personnel, teachers, administrators, etc., or to researchers. It could not be done for all in his judgment.

When asked whether Thesaurus headings were specific enough to avoid getting too much unrelated material, the panelists had a variety of comments. One suggested that some additional breakdown was needed; for example, areas such as "innovations" and "exceptional" should be reconsidered. Several indicated the need for a more consistent policy among Clearinghouses with regard to assigning descriptors. Some complained that new terminology was slow to be added, while other panel members suggested that attention should be paid quite as much to removing outdated terms as to adding new ones. It was also suggested that documents are not always indexed to the most appropriate term. Due to the decentralized system the terms have tended to become too specific in meaning--applying to a particular discipline.

When asked by site visitors whether they felt that additional data elements would be useful for describing the ERIC documents, respondents had several suggestions. Need was expressed for a title index and an identifiers index. Documents should be identified by category (e.g. report, speech, etc.); identifiers need to be standardized. Descriptors are too limited. With all these elements considered respondents assented strongly the need for a national computer system for searching with instant retrieval. Some suggested DATRIX as an example of what is needed.

Respondents to the individual users questionnaire were asked whether they considered as current the language chosen for descriptors (see Table 4C.4). This reflects the degree to which the language chosen for descriptors and used in indexing in CIJE and RIE is current in the representative educational fields.

There is almost unanimous agreement (93%) among respondents that indeed the language of the descriptors is current. The only exception to this agreement are undergraduates using the Thesaurus who reported 50% approval on a small sample size.

It is noteworthy that people actively involved with current school problems (i.e. administrators, teachers, consultants and graduate students) find the descriptors most current and representative. It is not unreasonable to assume that this finding is a function of their professional and pre-professional everyday involvement with research related to current problems.

Finally, users were asked (see Table 4C.5) to evaluate descriptors used to index RIE and CIJE as to specificity. Like the previous table, the information provided here suggests the effectiveness of descriptors used in the Thesaurus. It has already been established that, by and large, the descriptors are very useful and expressed in current language of the field; this data presents a finer discrimination, examining whether or not the descriptors have the appropriate degree of specificity. Again, there is overwhelming evidence (84%) that the descriptors are satisfactorily stated. Among these few users who felt that the descriptors were not satisfactory, a small percent of teachers (15%) R & D personnel (14%) and the undergraduates (20%) felt they were too specific and one consultant felt they were too general. However, the number involved in the sample indicate that since so few poeple felt dissatisfied, the descriptors in general are highly satisfactory.

TABLE 4C.1

FREQUENCY OF THESAURUS USE DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	44.4%	17.8%	37.8%	100%(45)
Teaching	36.5	24.3	39.2	100%(74)
Pupil Pers. Serv.	--	--	--	-- (2)*
R & D	23.1	30.8	46.2	100%(39)
Library	8.3	41.7	50.0	100%(48)
Consulting	36.4	54.5	9.1	100%(11)
Undergraduate	42.9	35.7	21.4	100%(14)
Graduate	29.2	37.2	33.6	100%(113)
Other	35.0	40.0	25.0	100%(20)
Overall	30.1	23.8	37.2	100%(366)**
Sex				
Male	35.1	25.7	39.2	100%(171)
Female	26.7	37.9	35.4	100%(195)**
Conducted Research				
Yes	28.1	31.1	40.7	100%(167)
No	28.1	36.0	36.0	100%(178)**
Published				
Yes	26.9	28.8	44.2	100%(104)
No	31.6	34.4	34.4	100%(256)**

Source: Individual User Questionnaire.
*Where N< 5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 40.2

INITIAL UTILIZATION OF ERIC THESAURUS BY USERS OF RIE AND CIJE

	RIE		CIJE	
Occupation	**%**	**(N)**	**%**	**(N)**
Administration	5.7%	(35)	15.4%	(26)
Teaching	11.7	(77)	15.9	(58)
Pupil Pers. Serv.	---	---	---	(1)*
R & D	21.0	(38)	18.5	(27)
Library	13.2	(53)	13.3	(45)
Consulting	8.3	(12)	16.7	(6)
Undergraduate	35.7	(14)	0.0	(3)*
Graduate	12.1	(116)	7.5	(93)
Other	14.3	(14)	33.3	(6)
Overall	13.3	(361)	12.8	(265)
Conducted Research				
Yes	15.4	(156)	16.4	(116)
No	11.4	(185)	12.1	(141)**
Published				
Yes	11.7	(94)	18.1	(72)
No	13.4	(261)	11.1	(190)**

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4C.3

USERS OVERALL EVALUATION OF THESAURUS

	Very Useful				No Use	Never Used		
	1	2	3	4	5	6		(N)
Occupation								
Administration	23.1%	17.9%	17.9%	15.5%	2.6%	23.1%	100%	(39)
Teaching	32.0	10.7	10.7	4.0	2.7	40.0	100%	(75)
Pupil Pers. Serv.	--	--	--	--	--	--	--	(3)*
R & D	26.2	23.8	26.2	2.4	7.1	14.3	100%	(42)
Library	37.7	22.6	15.1	11.3	0.0	13.2	100%	(53)
Consulting	20.0	20.0	10.0	0.0	0.0	50.0	100%	(10)
Undergraduate	6.3	12.5	12.5	0.0	6.3	62.5	100%	(16)
Graduate	35.7	14.8	15.7	4.3	0.0	29.7	100%	(115)
Other	40.0	0.0	20.0	13.3	0.0	26.7	100%	(15)
Overall	31.3	15.8	15.8	6.3	1.9	29.1	100%	(368)**
Conducted Research								
Yes	31.7	21.1	15.5	2.5	1.2	28.0	100%	(161)
No	30.8	13.0	16.8	9.2	1.1	29.2	100%	(185)**
Published								
Yes	29.0	16.0	20.0	5.0	3.0	27.0	100%	(100)
No	32.4	15.3	14.9	6.5	1.1	29.8	100%	(262)**
Organizations	43.5	22.1	13.6	4.2	2.6	13.6	100%	(191)

Source: Individual and Organization Questionnaires.
* Where N<5, Calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4C.4

ARE DESCRIPTORS REPRESENTATIVE OF CURRENTLY USED LANGUAGE?

User Occupation	Yes	No	(N)
Administration	96.3%	3.7%	100% (27)
Teaching	93.1	6.9	100% (58)
Pupil Pers. Serv.	----	---	--- (2)*
R & D	96.4	3.6	100% (28)
Library	93.2	6.8	100% (44)
Consulting	100.0	0.0	100% (6)
Undergraduate	50.0	50.0	100% (6)
Graduate	92.0	8.0	100% (87)
Other	100.0	0.0	100% (7)
Overall	92.8	7.2	100% (265)**
Conducted Research			
Yes	92.0	8.0	100% (112)
No	91.5	8.5	100% (142)**
Published			
Yes	93.2	6.8	100% (73)
No	89.0	11.0	100% (192)
Organizations	86.6	13.4	100% (224)

Sources: Individual and Organization Questionnaires
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4C.5

EVALUATION OF SUBJECT HEADINGS (DESCRIPTORS) USED TO INDEX RIE AND CIJE AS TO SPECIFICITY BY INDIVIDUAL SUBSCRIBERS

	Satisfactory	Too Specific	Too General	Other	(N)
Occupation					
Administration	89.7%	10.3%	0.0%	0.0%	100% (29)
Teaching	80.3	14.8	1.6	3.3	100% (61)
Pupil Pers. Serv.	--	--	--	--	-- (2)*
R & D	85.7	14.3	0.0	0.0	100% (28)
Library	86.7	4.4	8.9	0.0	100% (45)
Consulting	80.0	0.0	20.0	0.0	100% (5)
Undergraduate	80.0	20.0	0.0	0.0	100% (5)
Graduate	82.6	9.8	3.3	4.3	100% (92)
Other	85.7	14.3	0.0	0.0	100% (7)
Overall	83.9	10.6	3.3	2.2	100%(274)**
Conducted Research					
No	79.7	16.1	0.8	3.4	100%(118)**
Yes	84.2	8.2	5.5	2.1	100%(146)
Published					
No	79.7	17.6	1.4	1.4	100% (74)**
Yes	83.8	9.1	4.1	3.0	100%(197)

N = 494

Source: Individual User Questionnaire.
*Where N< 5, Calculations have been omitted.
**Totals differ because response rates differed.

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section D

RESEARCH IN EDUCATION and RIE ANNUAL INDEXES

Section D

RESEARCH IN EDUCATION AND RIE ANNUAL INDEXES

Research in Education (RIE) is a monthly abstract journal prepared by the education Resource Information Center (ERIC) to make possible the early identification and acquisition of reports of interest to the educational community. RIE is printed and distributed by the Superintendent of Documents (GPO), Washington, D. C., and is available at a domestic subscription price of $21.00 a year; foreign, $5.25; additional. RIE announces recently completed educational research reports, descriptions of exemplary programs, and other documents of interest to the educational community. Directed to school administrators, teachers and supervisors, students, school board members, commercial and industrial organization, educational researchers, and the public, this journal contains:

- A bibliographic listing and abstracts of current educational documents.
- Subject, author, institutional sources, and other indexes.

RIE publishes separately annual and semi-annual cumulative indexes which may be purchased from the GPO. Since this publication is a major avenue for entering the ERIC system, it is important to know who and how many are using it as well as the degree to which users are satisfied with it.

Tables 4D.1 through 4D.6 present data gathered for the core analysis of RIE and its annual indexes. The bulk of the data in these tables was gathered through the individual user questionnaire discussed in Chapter II of Volume III (Appendix). Numerous additional tables supporting and expanding on the analysis may be found under the corresponding chapter heading in Volume IV of

Parallel Tables.

Tables 4D.1 shows the numbers and types of RIE subscribers as well as growth in these numbers from August 1967 to February 1971. It must be noted that a peak was reached in December 1968, when 4422 subscriptions were in force. (Also 750 copies are distributed free each month to key educational agencies.) After a rapid increase from 1967 to 1968, the number of subscriptions seems to have reached a plateau. In February 1971, RIE had 4,200 paid subscribers from every state in the Union, the District of Columbia, the Trust Territories of the Pacific Islands, and 50 foreign countries. Institutions of higher education account for 38% of the subscriptions; state and local educational agencies have 27 percent; and all other groups hold 35 percent of the subscriptions.

In terms of the various categories of subscribers identified, a number of trends seem apparent. Whereas certain categories account for a relatively stable percentage of total subscriptions, others are in a state of flux. Individual subscriptions have declined, both in terms of absolute numbers as well as percentage (from 13 to 4 percent) of total subscriptions held by this group. There was a drop in subscriptions which occurred in large part between December, 1968, and February, 1971. A steadier, but equally pronounced drop of subscriptions is evident in the category of Commercial Organizations. Foreign subscription, by contrast, were the sixth largest category in 1967. Four years later they are the third largest group comprising over 13 percent of all RIE subscribers. A solid core of subscribers is formed by institutions of higher education and by local school districts who together account for nearly 65 percent of all RIE subscriptions.

Table 4D.2 cross-tabulates user categories by occupation according to the frequency with which they use RIE. This table suggests that users of RIE tend to be habitual. Of those who do use RIE, the majority have searched through it more than six times per year. Occupational categories reporting most frequent use of RIE included research and development, consulting, and library.

When we extrapolate to the professional role of users of RIE (Table 4D.3) it is evident the most frequent users are found among Regional Educational Laboratories, State Departments of Education, colleges and universities, and Research and Development Centers in that order. Local school administrators and teachers are frequent users of RIE but not ranked among the highest. Elementary and pre-school groups use RIE somewhat more frequently than users in Secondary Schools.

Whether or not a user has participated in research or published papers seems barely relevant to the number of times RIE was consulted. Those who did research or had published show only a slightly higher frequency of consultation.

Table 4D.4 estimates the number of people in various categories who use RIE in a typical week. From Table 4D.4 it can be seen that, of the twelve organizations or institutions identified, institutes of higher learning draw the largest absolute number of users (69) followed by state departments of education (35). Numbers of RIE users in businesses and in secondary schools is extremely low in these terms, attributable in part to small sample size. Also, it must be kept in mind that the respondents are organizations servicing ERIC users. It is possible that business and school personnel rely on college and university libraries for access to RIE. Judgments regarding intensity of usage should also be based on reports by individual users (Table 4D.5) showing 44% used RIE more than 6-10 times yearly and an additional 37% reported using RIE 1-5 times.

In order to obtain maximum congruency between the content of RIE and the needs of its users, it is important to know the reasons why RIE is being consulted. Table 4D.6 contains this information. As before, users are classified according to their main professional role and function.

In reading Table 4D.6 it is important not to lose sight of the fact that respondents are categorized by primary professional role because part of the responses regarding purposes are undoubtedly generated by demands of these individuals' secondary or tertiary professional functions (i.e., many teachers are also students for all or part of the year). This seems evident in the case of administrators, 37% of whom used RIE mainly for research projects, and of teachers, 50% of whom consulted RIE for assignments and term papers. In both cases overlapping within the categories and of professional roles is to be suspected.

Across occupational groups, "Updating of Course Bibliographies" is among the least frequent usages. In this category also belong "Browsing" and "Other." There seem to be some distinct trends present in the data, not generalizable across occupational role, however. As could be expected, students, both graduate and undergraduate, used RIE most frequently for assignments, term papers, and research projects. Whereas these usages are also prevalent among a number of other groups of users (teaching, research and development, library), the trend is a little less pronounced in these cases. Not surprisingly, administrators listed "Program improvement" quite frequently as a reason for consulting RIE.

Some distinct differences appear due to the breakdown of users into those who were involved in research efforts and those who were not. Researchers in general consulted RIE significantly more times for the purpose of "Keeping abreast in a field" than did non-researchers. The same seems to hold for use of RIE in research projects. Otherwise, differences due to this distinction among users are minimal.

The preceding tables presented information regarding the usage of RIE. In Table 4D.7 the question is: How do individual users use RIE? From this table it becomes apparent that most users consult RIE to locate a document which contains specific information. Without exception, all categories report using RIE most frequently to find some specific information. Overall, only a relatively small group both scans each issue for relevant information and uses RIE as a resource document. Overall, 17% of the users read or scan each issue for current awareness but apparently never look at them again.

Does a person's involvement in research affect his use habits? From the data in Table 4D.7 the answer seems to be yes. However, one result is surprising. Researchers tend, compared with non-researchers, to belong in larger numbers to the "skim-as-they-come-in" group and to use RIE relatively little as a source for information in later months or years. A similar pattern appears for those who have published as distinct from those who have not. In view of the fact that classification as a researcher and as one who publishes may coincide in many cases, this last finding is not surprising.

Table 4D.8 cross-tabulates user categories with their evaluation of how useful RIE is in their work. In general, those who use RIE are very satisfied with it, with 79% reporting on the two highest points of the 5-point scale. The data in Table 4D.8 is quite unambiguous in this respect. Only one half of one percent of this group passed a "no use" judgment, and only 13 percent rated RIE below a "2" on the 5-point scale. This favorable judgment is unanimous across occupations. It is also not affected by differences between researchers or non-researchers, or by differences among those who published and those who did not.

Within the scope of a general favorable evaluation, administrators find RIE least useful. Only 57 percent of this group granted this publication a top "very useful" rating. Whether or not this fact reflects a lack of emphasis in RIE on administration-oriented content cannot be determined from this data.

Table 4D.9 shows how successful RIE has been at helping journal subscribers to find information they need. Overall, 36.8% found such information often while 55.1% found it occasionally. The panelists had numerous suggestions for making

RIE more helpful. Among these were: flagging non-microfiche; providing running heads (this from many panelists); merging institutional entries without regard to subdivision; coding level (age, elementary, etc.) and type (reports, speeches, etc.); using page headings; returning to color coded sections; omitting non-available documents; placing subject heading guides at the top of each index page. The observation was also made that indexing was sometimes careless and inconsistent, e.g., as to whether indexing should be general or specific.

With regard to the quality and timeliness of materials indexed in RIE, panelists had reservations. Material on "hot topics" was often not available. The quality was uneven. These were the two basic comments, but they were echoed by most of the panelists.

Accumulated, annual RIE indexes provided yet another possible entry point into the ERIC system. Data was therefore collected on the frequency with which these indexes were used as well as on respondent satisfaction with them. Table 4D.10 cross-tabulates use frequency with users' occupational characteristics. It may be compared with Table 4D.2 in which similar data on RIE have been summarized. The tables show several quite comparable patterns of usage. So similar, indeed, that one ventures the hypothesis that both indexes may be regularly used in conjunction.

It is notable, from Table 4D.10 that most occupational groups reflect the frequency breakdown shown in the overall category. An exception is formed by the undergraduate group, very few of whom consult the accumulated indexes more than five times a year. This group constitutes a clear contrast with the other user groups.

Table 4D.11 cross-tabulates respondents with the degree to which they found those annual indexes useful. If we remove the 15% who never used the accumulative indexes, four out of five actual users rated the indexes 1 or 2, indicating a great deal of satisfaction. The overall percentages match those for "Research" and "Published," an indication that neither of these variables is related to degree of satisfaction with the cumulative indexes.

Entries in the "never used" column are low, with the exception of the undergraduate category. The table also indicates that very few users have ambivalent feelings about the cumulative indexes. Ratings of "3" are only relatively prominent among the administration group which, relatively speaking, is the most ambivalent of the categories.

A large body of additional data on RIE use and users is included in the parallel tables of the Appendix, much of which warrants further study. Information is also available on user reaction to specific RIE problems, e.g., preferred treatment of unavailable documents.

TABLE 4D.1

NUMBERS AND TYPES OF RIE SUBSCRIBERS

TYPE	Aug., 1967*		Dec., 1968**		Feb., 1971***	
	Number	Percent	Number	Percent	Number	Percent
Higher Education Inst.	1115	35.6%	1532	34.6%	1603	38.3%
Local School Districts	712	22.7%	1289	29.2%	1067	25.5%
State Education Agencies	85	2.7%	124	2.8%	81	1.9%
Individuals	400	12.8%	478	11.0%	152	3.7%
Commercial Organizations	371	11.8%	346	7.8%	238	5.7%
Foreign	122	3.9%	286	6.4%	559	13.4%
Federal Agencies	65	2.1%	78	1.7%	112	2.7%
Non-Profit Organizations	38	1.2%	239	5.4%	207	5.0%
Other	223	7.1%	50	1.1%	156	3.8%
TOTAL	3131	100.0%	4422	100.0%	4175	100.0%

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*Source: Lee G. Burchinal,"Evaluation of ERIC,"June, 1968. (ED020 405)
**Source: Lee G. Burchinal,"Development of ERIC through December, 1968." (ED020 449)
***Source: RIE Subscriber List.

TABLE 4D.2

FREQUENCY OF RIE USE DURING 1970
REPORTED BY INDIVIDUAL USERS

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	14.9%	31.9%	53.2%	100% (47)
Teaching	17.4	42.4	40.2	100% (92)
Pupil Pers. Serv.	---	---	---	100% (3)*
R & D	8.9	33.3	57.8	100% (45)
Library	1.8	33.3	64.9	100% (57)
Consulting	13.3	40.3	46.7	100% (15)
Undergraduate	30.0	50.0	20.0	100% (20)
Graduate	12.1	47.0	40.9	100%(132)
Other	23.8	28.6	47.6	100% (21)
Overall	13.4	39.8	46.8	100%(432)**
Conducted Research				
Yes	10.1	35.8	54.2	100%(179)
No	15.4	42.1	42.5	100%(228)**
Published				
Yes	10.4	37.4	52.2	100%(115)
No	14.1	41.5	44.4	100%(311)**

Source: Individual User Questionnaire
*Where N < 5, calculations have been omitted.
**Totals differ because number of respondents differed.

TABLE 4D.3

USE OF RIE DURING 1970 BY RESPONDENT'S PRIMARY ASSOCIATION

Primary Association	None	1-5	6-10	More Than 10	(N)
Pre-school	16.7	16.7	50.0	16.7	100% (6)
Elementary	8.6	50.0	20.7	20.7	100% (58)
Secondary	33.3	40.0	13.3	13.3	100% (30)
College or University	12.7	38.7	22.6	25.9	100%(212)
State Department of Education	23.1	23.1	15.4	38.5	100% (13)
Regional Educational Laboratory	3.6	42.9	14.3	39.3	100% (28)
Research and Development Center	23.1	23.1	30.8	23.1	100% (13)
Professional Organization	----	----	----	----	---- (3)*
Office of Education Regional Office	----	----	----	----	---- (4)*
Other Federal Agency	28.6	28.6	14.3	28.6	100% (7)
Local or Regional Information Center	----	----	----	----	---- (2)*
Business or Industry	----	----	----	----	---- (1)*
Other	4.2	47.9	18.7	29.2	100% (48)
Overall	12.7	39.5	21.2	26.6	100%(425)

Source: Individual User Questionnaire.
* When N<5, calculations have been omitted.

TABLE 4D.4

ESTIMATED MEAN NUMBER OF PEOPLE USING RIE IN A TYPICAL WEEK BY ORGANIZATION

Organization	$\bar{X}$	(N)
Secondary School	1.0	(2)
College or University	44.1	(69)
State Dept. of Education	10.8	(35)
Reg. Ed. Laboratory	12.7	(13)
R & D Center	20.0	(8)
Professional Organization	10.8	(5)
OE Regional Office	7.2	(6)
Other Federal Agencies	13.6	(6)
Local or Reg. Info. Center	12.8	(6)
Business or Industry	2.2	(5)
Other	8.1	(30)
	$\bar{X}$ = 23.0	N = 185

Source: Organization Questionnaire

TABLE 4D.5

USE OF RIE DURING 1970 BY INDIVIDUAL USERS

	%	N
Never	12.3	(61)
1-5	36.7	(181)
6-10	18.7	(92)
More than 10	24.2	(119)
No Response	8.1	(40)
Totals	100.0	(493)

Source: Individual User Questionnaire

TABLE 4D.6

MAIN PURPOSES FOR WHICH RIE IS USED BY OCCUPATION OF INDIVIDUAL USERS**

RIE Used For: User's Occupation	Keeping Abreast in a Field	Assignments and Term Papers	Updating of Course Bibliographies	Curriculum Development	Program Improvement	Speech, Report, Article Preparation	Research Project	Browsing	Other	(N)
Administration	40.7	24.1	3.7	33.3	35.2	16.7	37.0	14.8	5.7	(53)
Teaching	25.5	50.0	14.9	14.9	13.9	31.7	51.5	11.9	1.0	(102)
Pupil Pers. Serv.	—	—	—	—	—	—	—	—	—	(4)*
R & D	33.3	8.9	6.7	35.6	20.0	15.9	48.9	6.7	11.1	(45)
Library	22.0	39.0	16.9	8.5	10.2	20.3	44.1	6.8	29.3	(58)
Consulting	37.5	25.0	6.3	18.7	31.3	33.3	18.7	6.3	6.3	(16)
Undergraduate	0.0	45.8	4.2	4.2	4.2	16.7	25.0	8.3	4.2	(24)
Graduate	12.3	64.5	5.8	5.8	4.3	16.7	43.8	8.8	2.2	(138)
Other	18.2	13.6	4.8	9.1	13.6	9.1	36.4	0.0	13.6	(22)
Overall	22.5	42.9	8.9	14.7	13.6	20.0	43.1	9.3	7.6	(462)
Conducted Research										
Yes	31.1	38.9	13.8	19.6	16.4	26.1	58.7	11.1	4.2	(189)
No	16.5	47.5	6.7	15.2	10.9	18.5	32.9	7.6	11.0	(237)
Published										
Yes	34.2	33.3	14.2	21.7	16.7	26.9	49.2	12.6	12.6	(119)
No	18.3	46.2	7.9	12.7	12.0	19.6	41.4	7.5	7.5	(332)

TABLE 4D.7

WAYS IN WHICH RIE WAS USED DURING 1970 BY USER'S OCCUPATION

Occupation	Read or Scan Each Issue for Current Awareness	Search Past Issues or Volumes to Locate Specific Information	Both	Never Used	(N)
Administration	24.4%	58.5%	9.8%	7.3%	100% (41)
Teaching	16.2	70.0	8.7	5.0	100% (80)
Pupil Pers. Serv.	0.0	0.0	0.0	0.0	100% (3)*
R & D	17.9	66.7	7.7	7.7	100% (39)
Library	17.6	68.6	11.8	2.0	100% (51)
Consulting	27.3	63.6	9.1	0.0	100% (11)
Undergraduate	14.3	57.1	7.1	21.4	100% (14)
Graduate	14.0	70.1	2.8	13.1	100%(107)
Other	14.3	57.1	21.4	7.1	100% (14)
Overall	16.9	66.7	8.1	8.3	100%(360)**
Conducted Research					
Yes	23.7	59.4	9.4	7.5	100%(160)
No	12.2	71.1	7.8	8.9	100%(180)**
Published					
Yes	24.5	59.8	6.9	8.8	100%(102)
No	14.6	69.7	8.3	7.5	100%(254)**

Source: Individual User Data

*Where N < 5, calculations have been omitted.

**Totals differ because number of respondents differed.

TABLE 4D.8

EVALUATION OF RIE
BY OCCUPATION OF RESPONDENTS

Occupation	Very Useful 1	2	3	4	No Use 5	Never Used 6	(N)
Administration	56.5%	17.4%	19.6%	4.3%	0.0%	2.2%	100% (4
Teaching	69.6	12.0	7.6	2.2	0.0	8.7	100% (9
Pupil Pers. Serv.	----	----	----	----	----	----	(
R & D	68.9	11.1	13.3	2.2	0.0	4.4	100% (4
Library	86.2	5.2	1.7	5.2	0.0	1.7	100% (5
Consulting	75.0	8.3	0.0	8.3	8.3	0.0	100% (1
Undergraduate	50.0	10.0	10.0	0.0	5.0	25.0	100% (2
Graduate	60.9	16.4	10.2	3.1	0.0	9.4	100% (1
Other	61.1	16.7	11.1	5.6	0.0	5.6	100% (1
Overall	66.6	12.8	9.5	3.3	0.5	7.3	100% (4
Conducted Research							
Yes	69.1	12.4	11.8	1.7	0.6	4.5	100% (1
No	67.0	13.7	7.1	4.7	0.0	7.5	100% (2
Published							
Yes	64.9	14.4	9.9	5.4	0.0	5.4	100% (1
No	67.8	13.0	8.3	3.0	0.7	7.3	100% (3
Organizations	68.3	16.8	7.4	2.5	0.0	4.5	100% (2

Sources: Individual User and Organization Questionnaire
* Where N<5, calculations have been omitted.
** Totals differ because rate of respondents differed.

TABLE 4D.9

HOW OFTEN PATRON FINDS INFORMATION BEING LOOKED FOR IN RIE BY PROFESSIONAL JOURNAL SUBSCRIBERS

Occupation	Often	Occasionally	Never		(N)
Administration	34.6%	57.0%	8.4%	100%	(107)
Teaching	37.2	53.6	9.2	100%	(196)
Pupil Pers. Serv.	--	--	--	--	(1)*
R & D	11.1	77.8	11.1	100%	(9)
Library	46.7	53.3	0.0	100%	(15)
Consulting	41.4	51.7	6.9	100%	(29)
Undergraduate	33.3	50.0	16.7	100%	(6)
Graduate	40.0	60.0	0.0	100%	(15)
Other	60.0	40.0	0.0	100%	(5)
Overall	36.8	55.1	8.1	100%	(383)

Source: Professional Journal Questionnaire
* Where N<5, calculations have been omitted

TABLE 4D.10

FREQUENCY OF USE OF ACCUMULATED INDEXES FOR RIE DURING 1970 BY OCCUPATION OF RESPONDENTS

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	22.2%	31.1%	46.7%	100% (45)
Teaching	27.8	30.4	41.8	100% (79)
Pupil Pers. Serv.	--	--	--	-- (3)*
R & D	7.7	30.8	61.5	100% (39)
Library	12.2	12.2	75.5	100% (49)
Consulting	22.2	33.3	44.4	100% (9)
Undergraduate	37.5	50.0	12.5	100% (16)
Graduate	19.2	41.7	39.2	100%(120)
Other	9.5	38.1	52.4	100% (21)
Overall	19.4	33.1	47.5	100%(381)**
Conducted Research				
Yes	16.9	28.9	54.2	100%(166)
No	19.8	37.0	43.2	100%(192)**
Published				
Yes	15.4	32.7	51.9	100%(104)
No	21.4	32.8	45.8	100%(271)**

Source: Individual User Questionnaire
*Where N< 5, calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4D.11

EVALUATION OF
ACCUMULATED INDEXES FOR RIE
BY OCCUPATION OF RESPONDENTS

	Very Useful				No Use	Never Used	
	1	2	3	4	5	6	N
Occupation							
Administration	48.8%	14.6%	19.5%	2.4%	0.0%	14.6%	100% (41)
Teaching	51.2	22.6	9.5	1.2	0.0	15.5	100% (84)
Pupil Pers. Serv.	--	--	--	--	--	--	-- (3)*
R & D	61.4	20.5	4.5	6.8	0.0	6.8	100% (44)
Library	77.2	8.8	1.8	3.5	0.0	8.8	100% (57)
Consulting	77.8	11.1	0.0	0.0	0.0	11.1	100% (9)
Undergraduate	23.5	11.8	5.9	0.0	11.8	47.1	100% (17)
Graduate	52.4	19.4	8.1	4.0	0.0	16.1	100%(124)
Other	68.8	6.3	6.3	6.3	0.0	12.5	100% (16)
Overall	56.5	17.0	7.8	3.3	0.5	14.9	100%(395)**
Conducted Research							
Yes	56.7	17.0	9.9	2.9	0.6	12.9	100%(171)
No	57.8	18.1	6.5	4.0	0.0	13.6	100%(199)**
Published							
Yes	56.0	16.5	10.1	5.5	0.0	11.9	100%(109)
No	56.3	17.6	7.5	2.9	0.4	15.4	100%(279)**
Organizations	68.6	13.9	4.6	2.6	0.5	9.8	100%(194)

Source: Individual User and Organization Questionnaires.
*Where N < 5, Calculations have been omitted.
**Totals differ because response rates differed.

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section E

CURRENT INDEX TO JOURNALS IN EDUCATION

Section E

CURRENT INDEX TO JOURNALS IN EDUCATION

CIJE, the Current Index to Journals in Education is also a major access point for users of the ERIC system. It is a monthly guide to the periodical literature begun in January 1969, which indexed 11,707 articles in nearly 220 periodicals during its first year alone. Two years later coverage had grown to more than 500 major educational and education-related publications. CIJE includes a main entry section with annotations, and indexed by subject and author. Semiannual and annual cumulative indexes are also available.

Data on CIJE users, like that on RIE users, provides important clues to the characteristics and behavior of both actual and potential users of the ERIC system. Tables 4E.1-4E.6 present data on CIJE. The bulk of it was derived from the individual user questionnaire.

Table 4E.1 cross-tabulates the number and types of CIJE subscribers as of February, 1971, when it reached a total of 2,271. As is the case with RIE, the largest number of subscribers to CIJE is found among the institutions of higher learning. The second highest group is formed by local school districts, closely followed by foreign subscriptions. These three groups account for over 80 percent of all subscriptions. Particularly noteworthy is the virtual absence of individual subscriptions, somewhat fewer than RIE. This may be due in part to the price of CIJE.

Table 4E.2 cross-tabulates frequency of CIJE use with the occupational categories of respondents. The table also indicates whether or not respondents were engaged in research and whether or not they published during the five years preceding completion of the questionnaire. The data indicate that all three variables are relevant. Occupations agree on a moderate absence of CIJE index use. Here, as in other cases, it is prudent to consider only percentages based on groups including at least 20 respondents. With two exceptions, this sample indicates a "never" percentage close to the overall index: 34.2 percent. The exception are library workers and graduate students. Even among them, however, 22 percent and 27 percent respectively never use CIJE. On the other hand, high frequency usage (i.e., six times or more per year) is also common within these same groups, i.e., librarians report a high usage rate of 41 percent and 27 percent of graduate students report use of CIJE six times or more during the past year.

With respect to the research variable, those who indicated not having done any research showed a considerably lower frequency of use. Of this group only 23 percent consulted CIJE more than six times per year, and 45 percent used this index only 1-5 times. Those who had been involved in research divided nearly equally over the three options. A similar, though somewhat enhanced picture is formed on the publication dimension.

Finally, of the 18 undergraduates responding, roughly 15 never used the index. One may tentatively conclude either that undergraduates rarely feel the need for this journal or are not yet aware of it after only two years of publication.

Table 4E.3 cross-tabulates various organizations with the estimated number of people who use CIJE in a typical week. It goes without saying that the mean number of people using CIJE in a typical week must be interpreted in terms of the potential number of users. The high frequency at colleges is, in this light, not surprising. The relatively high overall mean, 17.2, is contributed largely by the colleges and universities. It is not prudent to rely on individual organization means with a sample size of less than ten.

What are the reasons for using CIJE? Table 4E.4 discloses some interesting differences among respondents in different professional roles. Again limiting analysis to the large groups, one notices that, with the exception of administrators, use of CIJE for ~~assignments~~ and term papers. Among users in administration, "keeping abreast" and "curriculum development" are the most impelling motives for using CIJE. "Assignments and term papers," by contrast, is a much more prevalent choice for those in "teaching," "library" and "graduate" categories. Indeed it seems that CIJE serves a variety of needs, depending on the user.

One finding is that 20 percent of those who said they had not conducted research checked "Research project" as their main reason for using the CIJE. This puzzling finding can probably only be explained by assuming that respondents used varying definitions of "research" while filling out the questionnaire: a "research project" may seem a different thing from "basic or applied research."

Table 4E.5 cross-tabulates particular uses of CIJE with the occupational category of respondents. The table also correlates usage with the research and publication variables. Most users of CIJE (76 percent) consult it with a definite purpose in mind. This trend becomes even clearer if one excludes the nearly 18 percent who never used CIJE. Roughly two of every three actual users need specific information for which they search the index. This finding holds across researchers and non-researchers alike as well as across those who have published and those who have not. Those who primarily scan the CIJE when new fall largely into two occupational groups: R & D and administration. To what extent professional reading habits play a role in this finding cannot be determined from this data.

Table 4E.6 cross-tabulates occupational characteristics with respondents' satisfaction with CIJE. Users rate CIJE somewhat lower than they did RIE (no identity of users' groups is implied). The overall statistics show that 58 percent rate the index as highly useful (one or two). If we exclude the "never used" category on grounds that no judgment regarding satisfaction with CIJE can be involved, one of every four actual users rates CIJE relatively low (3, 4 or 5). While three of four users are rather satisfied with the index. For the RIE, the comparable statistic is roughly four out of five satisfied customers (rating one or two).

In related measures of usefulness CIJE compares favorably with other such educational indexes (see Table 4E.7). Overall, individual user respondents ranked CIJE either "equally useful" (40.7%) or "more useful" (48%). ERIC users in all of the following professional and occupational categories rated CIJE by similar vote "equally useful" or "more useful:" local schools,(preschool, elementary and secondary),colleges and universities, state departments of education, and Regional Educational Laboratories. In only the category "college and university" did less than one-third (32.6%) of users propose "more useful." By contrast, users from Regional Educational Laboratories favored CIJE as more useful by 63%.

Some of the panelists' comments made in November 1970 with reference to CIJE were noted in discussing RIE. Further comments specific to CIJE were that it is too sporadic in its publication; needs more annotation of citations; should be more punctual in delivery.

TABLE 4E.1

NUMBER AND TYPES OF CIJE SUBSCRIBERS

TYPE	February, 1971 Number	Percent
Higher Education Institute	895	39.4%
Local School Districts	712	31.4
State Education Agencies	71	3.1
Individuals	15	0.6
Commercial Organizations	62	2.7
Foreign	302	13.3
Federal Agencies	36	1.6
Non-Profit Organizations	117	5.2
Other	61	2.7
TOTAL	2271	100%

SOURCE: CIJE Subscriber List

TABLE 4E.2

FREQUENCY WITH WHICH CIJE WAS USED DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	37.0%	34.8%	28.3%	100% (46)
Teaching	34.4	35.6	30.0	100% (90)
Pupil Pers. Serv.	--	--	--	-- (3)*
R & D	32.6	37.2	30.2	100% (43)
Library	22.4	36.2	41.4	100% (58)
Consulting	54.5	27.3	18.2	100% (11)
Undergraduate	77.8	22.2	0.0	100% (18)
Graduate	27.1	45.7	27.1	100%(129)
Other	58.8	23.5	17.6	100% (17)
Overall	34.2	37.3	28.4	100%(415)**
Conducted Research				
Yes	31.6	31.6	36.8	100%(171)
No	31.8	45.2	23.0	100%(217)**
Published				
Yes	31.1	36.8	32.1	100%(106)
No	34.2	38.9	26.9	100%(301)**

Source: Individual User Questionnaire.
*Where N < 5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4E.3

ESTIMATED NUMBER OF PEOPLE USING CIJE IN A TYPICAL WEEK

Organization	$\bar{X}$	(N)
Secondary School	2.5	(1)
College or University	37.1	(54)
State Dept. of Education	7.3	(32)
Reg. Ed. Laboratory	6.9	(10)
R & D Center	2.8	(5)
Professional Organization	8.0	(5)
OE Regional Office	2.5	(6)
Other Federal Agencies	7.5	(5)
Local or Reg. Info. Center	2.3	(5)
Business or Industry	1.4	(3)
Other	3.5	(23)
	$\bar{X}$ = 17.2	N = 149

Source: Organization Questionnaire

TABLE 4E.4

MAIN PURPOSES FOR WHICH CIJE IS USED BY INDIVIDUAL USERS

CIJE Used For: User's Occupation	Keeping Abreast in a Field	Assignments and Term Papers	Updating of Course Bibliographies	Curriculum Development	Program Improvement	Speech, Report, Article Preparation	Research Project	Browsing	Other	(N)
Administration	24.5	15.1	1.9	22.6	18.9	11.3	15.1	9.4	3.8	(53)
Teaching	18.5	34.3	9.8	9.8	8.8	23.5	29.4	9.8	0.0	(102)
Pupil Pers. Serv.	—	—	—	—	—	—	—	—	—	(4)*
R & D	15.2	10.9	2.2	19.6	13.0	17.4	32.6	10.9	10.9	(46)
Library	15.5	31.0	12.1	10.3	10.3	22.4	29.3	3.4	18.6	(59)
Consulting	6.3	6.3	6.3	6.3	18.7	12.5	12.5	6.3	0.0	(16)
Undergraduate	4.3	13.6	4.3	4.3	4.5	4.3	8.7	4.3	4.3	(23)**
Graduate	10.9	56.9	3.7	1.5	1.4	10.9	32.1	5.1	0.7	(137)**
Other	4.5	9.1	4.5	4.5	4.5	9.1	18.2	0.0	4.5	(22)
Overall	14.6	32.6	5.9	9.1	8.2	15.6	26.7	6.9	4.5	(462)**
Conducted Research										
Yes	20.7	29.8	9.0	12.2	10.1	20.2	35.1	9.0	2.7	(188)
No	11.0	36.9	4.2	8.4	7.6	13.5	21.1	6.3	6.7	(238)**
Published										
Yes	24.4	18.5	8.5	16.0	11.8	21.0	30.3	10.9	2.5	(119)
No	11.5	37.9	5.7	6.9	6.6	15.1	26.0	6.3	5.4	(332)**

Source: Individual User Questionnaire.

* Where N<5, Calculations have been omitted.

** Each respondent could mark one or more "main purpose." Percentages are of total number representing each occupational category.

TABLE 4E.5

WAYS IN WHICH CIJE IS USED BY OCCUPATION OF RESPONDENTS

	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used		(N)
Occupation						
Administration	21.1%	52.6%	5.3%	21.1%	100%	(38)
Teaching	16.2	60.3	7.4	16.2	100%	(68)
Pupil Pers. Serv.	--	--	--	--	--	(2)
R & D	25.0	52.8	2.8	19.4	100%	(36)
Library	10.6	72.3	10.6	6.4	100%	(47)
Consulting	20.0	60.0	0.0	20.0	100%	(5)
Undergraduate	8.3	33.3	0.0	58.3	100%	(12)
Graduate	7.4	70.2	5.3	17.0	100%	(94)
Other	20.0	60.0	10.0	10.0	100%	(10)
Overall	14.1	62.2	6.1	17.6	100%	(312)
Conducted Research						
Yes	15.6	64.4	5.9	14.1	100%	(135)
No	13.5	61.3	6.1	19.0	100%	(163)
Published						
Yes	17.1	62.2	4.9	15.9	100%	(82)
No	14.0	62.6	5.9	17.6	100%	(222)

Source: Individual User Questionnaire.
*Where N < 5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4E.6

OVERALL EVALUATION OF CIJE BY INDIVIDUAL USERS AND BY ORGANIZATIONS

	Very Useful				No Use	Never Used		
Users' Occupation	1	2	3	4	5	6		(N)
Administration	31.4%	20.0%	14.3%	11.4%	0.0%	22.9%	100%	(35)
Teaching	41.8	20.3	7.6	2.5	2.5	25.3	100%	(79)
Pupil Pers. Serv.	--	--	--	--	--	--	--	(3)*
R & D	43.9	12.2	12.2	12.2	0.0	19.5	100%	(41)
Library	48.1	18.5	11.1	13.0	0.0	9.3	100%	(54)
Consulting	42.9	14.3	28.6	14.5	0.0	0.0	100%	(7)
Undergraduate	6.7	13.3	0.0	6.7	6.7	66.7	100%	(15)
Graduate	43.9	15.4	13.8	5.7	0.0	21.1	100%	(123)
Other	35.7	14.3	14.3	0.0	0.0	35.7	100%	(14)
Overall	41.0	16.7	11.6	7.3	0.8	22.8	100%	(371)**
Conducted Research								
Yes	36.9	19.4	16.9	4.4	0.0	22.5	100%	(160)
No	44.2	15.3	8.9	10.5	1.1	20.0	100%	(190)**
Published								
Yes	46.0	14.0	14.0	6.0	1.0	19.0	100%	(100)
No	39.3	18.0	11.6	7.9	0.4	22.8	100%	(267)**
Organizations	31.0	21.9	19.8	8.0	0.5	18.7	100%	(187)

Source: Individual and Organization Questionnaires.
*Where N < 5, Calculations have been omitted.
**Totals differ because response rates differed.

TABLE 4E.7

HOW CIJE COMPARES IN USEFULNESS WITH OTHER SUCH INDEXES BY RESPONDENT'S PRIMARY ASSOCIATION

Primary Association	Less Useful	Equally Useful	More Useful		(N)
Preschool	0.0%	60.0%	40.0	100%	(5)
Elementary	12.2	41.5	46.3	100%	(41)
Secondary	0.0	52.6	47.4	100%	(19)
College or University	8.9	58.8	32.6	100%	(135)
State Department of Education	0.0	50.0	50.0	100%	(8)
Regional Educational Lab	6.3	31.3	62.5	100%	(16)
Research and Development Center	----	----	----	----	(4)*
Professional Organization	----	----	----	----	(1)
OE Research Office	----	----	----	----	(3)
Other Federal Agency	16.7	50.0	33.3	100%	(6)
Local or Regional Info. Center	----	----	----	----	(1)
Business or Industry	----	----	----	----	(1)
Other	11.1	40.7	48.1	100%	(27)
Overall	8.2	52.4	39.3	100%	(267)

Source: Individual User Questionnaire
* Where N<5 calculations have been omitted

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section F

Indexes to Special Collections

Section F

INDEXES TO SPECIAL COLLECTIONS

In addition to the general indexes just discussed, there are several special ERIC collections. These are: the Manpower Research Inventory; Catalog of Selected Documents on the Disadvantaged; Pacesetters in Innovation; Office of Education Research Reports, 1956 through 1965; and Selected Documents in Higher Education.[1]

The data indicating the frequency with which these special collections have been used is summarized in Table 4F.1. Specific breakdowns by professional role or occupation of users are presented separately for each collection, indicating occupation, conduct of research, and publication by users. All of the data in the tables used for analysis (Tables 4F.1 - 4F.11) are derived from the individual user questionnaires discussed in Volume III of the Appendix. Additionally, two tables are included (4F.13 and 4F.14) which summarize the estimated mean usage per individual of special document collections during 1970 by occupation and by primary association.

For each special collection the overall frequency of use is calculated from Table 4F.1. This table differs in the rate of use from the frequency tables for the separate special collections in that the non-response rate is figured for overall use in Table 4F.1 but is not indicated in the separate frequency tables for each collection arranged by occupation, conduct of research and publication by users.[2] A second way in which the frequency tables for each separate collection differ from the overall data is that the rate of use for Table 4F.1 is extended to more than 25 times per year while the rate of use by the separate collection tables is limited to specifying a use rate of six and more times per year.

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[1] Exclusive of Higher Education Documents, which cannot be purchased.

Table 4F.1 shows that overall 39 percent of the respondents never use Pacesetters in Innovation. Of the actual users, 17 percent indicate using Pacesetters between 1-5 times per year. Turning to the occupation breakdown (Table 4F.2) administrators and teachers rank highest among those who never use this collection if one excludes the small group of undergraduates responding. Those who conduct research and publish seem to use these documents somewhat more frequently than their counterparts, but it is doubtful that these differences reflect a real trend rather than some incidental sampling characteristic.

Table 4F.3 evaluates the degree to which respondents found Pacesetters in Innovation useful. Analysis indicates some uncertainty as to the value of this collection in the eyes of respondents. The table shows a relatively high number of 3 ratings, and only 17.7 percent overall rated this publication at the upper end of the scale. As before, however, it seems proper to restate this percentage, excluding non-users (and non-respondents to this question). Of those who actually use Pacesetters, roughly 21 percent indicated that the publication was relatively useful (1 and 2 ratings).

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[2] Non-respondents here is used to indicate those respondents who returned usable questionnaires but who did not mark this particular question.

The overall use frequency pattern revealed in Table 4F.1 for the Catalog of Selected Documents on the Disadvantaged resembles that for the Pacesetters. Relatively few respondents (40%) ever used the Catalog. Of those who did, roughly half restricted its usage to less than six times a year. Higher percentages for any particular occupational group more likely than not are a function of small samples (Table 4F.4). Librarians, consultants, and graduate students seem to favor the Catalog somewhat more than other groups. Of those who used it, the majority consulted it more than six times. A trend in the reverse direction seems to prevail among those in the teaching category.

No differences appear with respect to either the research or the publication variables.

Table 4F.5 presents users' evaluation of the collection on the Disadvantaged. How satisfied were the users of this catalog? As already mentioned in the discussion of Table 4F.1, many respondents (roughly 40%) did not use the catalog at all. A notable exception is again formed by organization-respondents (Table 4F.5). Of this group, only one out of four responding never consulted the catalog. In terms of individual users, those that had not published apparently had even less need to consult the catalog than those who had published. No such difference is traceable to the research variable.

This table (4F.5) shows that, excepting the organizations, nearly half of those who indicated having used the Catalog expressed considerable satisfaction (1 or 2 ratings). For organizations, this index is somewhat lower. About one of four organizations arrived at such high ratings. The reason for this difference is not apparent from the data available here.

Overall use frequency of Selected Documents in Higher Education shows an even lower rate (28%) than for other special collections (Table 4F.1). This is accounted for in part by its unavailability for purchase.

Table 4F.6 cross-tabulates use frequency of Selected Documents in Higher Education with the occupational category of users as well as research and publication variables. ERIC product users in all occupation categories indicated rather uniformly a low usage frequency for the Selected Documents in Higher Education (SDHE) (not surprising, since copies cannot be obtained from EDRS as noted above.). Those who do use the documents, however, seem to have a relatively high and frequent need for them.

Table 4F.7 presents data on respondents' satisfaction with the usefulness of that particular collection. The pattern apparent with regard to special collections discussed above reappears in Table 4F.7: organization users and individual respondents appear to differ somewhat in their evaluation of SDHE. First, organizations tend to have a lower no-use percentage. This, of course, must be reflected in subsequent judgments in proportions of respondents who check a particular rating.

With respect to respondents who checked a rating lower than "2", individual users and organizations seem to react similarly. If one examines evaluation by people who actually use SDHE, the picture becomes slightly different. Individuals in this group checked "3" and below ratings half of the time while organizations checked "3" or below about two out of three times. Again, it appears that these specialized documents are of relatively little use to organizations as compared with usage by individuals.

Among the special collections, the Manpower Research Inventory was used relatively lightly. Overall, some 45.7% of the respondents had never used it, (Table 4F.1); this does not include a non-response rate of 29.4%. This high rate of non-users is also typical for most occupational groups, with only consultants (44%), librarians (40%), and administrators (36%) categories, reporting use of 1-5 times or more per year. The relative high percentage for consultants can perhaps be explained as a sampling variation due to an extremely small cell size.

Table 4F.8 reflects a tendency among this collection's users to use them rather infrequently. Though the evidence is not conclusive, the data in this table suggest a rather specialized group of users across occupations. In this context it is worth noting the differences revealed by the research and publication variables. Those who had not published used the indexes much less frequently than those who had. However, the same cannot be said with regard to researchers and non-researchers. One is tempted to speculate that the characteristics of the user group are, at least, only partly reflected in the absence of the usual overlap between ratings of researchers and published authors and between their counterparts. It is also worth noting in this respect that, of those responding to the question relevant to the frequency with which the Manpower Research Inventory is used, those who have published constitute a much smaller proportion than is generally true of those using the documents discussed on preceding pages. This find again points to a very special group of users.

The above statistics came from individual respondents. Clearly these respondents are less favorable than organization respondents. The question then arises whether professional groups differ with respect to their evaluation of the Manpower Research Inventory. The rather special nature of the document would make such a question logical.

If only groups with a large number of respondents are considered (Over 30) and adjust for the varying proportions of people who never used the Index, the following conclusion seems warranted. There is a remarkable consistency among those in the "administration," "teaching," "R & D," and "graduate" categories. Roughly two out of five people in these groups who actually used the Inventory gave it a 1 or 2 rating. Only the library category is out of step. Of the professionals in this group only one out of five rated the Inventory this high.

Another special collection, the Office of Education Research Reports, is used relatively frequently by contrast with such documents as, say, the Manpower Inventory and the Selected Documents in Higher Education (Table 4F.1). About 35% of the respondents use the Reports, and they are concentrated over the first frequency categories (17%). The heaviest user categories include R & D (61%), library (55%), consulting (50%), teachers (49%), and administration (48%), based on use of 1-5 times per year or more (Table 4F.10). One distinctly interesting finding is that patterns of usage are linked with the "research" and "publication" variables. Researchers used the Reports more often than did non-researchers (6 out of 10 versus 4 out of 10). An almost identical difference exists between those who had published and those who had not.

In terms of trends among professional groups it is necessary to limit conclusions to the five first listed groups in Table 4F.10, exclusive of "Pupil Personnel Service" (small cell sizes in this and other excluded groups makes this caution necessary). Administrators and teachers tend to use the Research Reports less frequently than those in R & D and in libraries. The difference with the latter group is comparably small, however. This finding was to be expected; the data in Table 4F.10 merely illustrates that the Research Reports reach primarily their intended user population: R & D professionals, and "researchers" as opposed to "non-researchers."

Table 4F.11 illustrates what was already obvious in the preceding tables: respondents may not always be consistent from question to question in their replies. Only thus can we explain such discrepancies as are noticeable in the responses of administrators to the frequency question. According to Table 4F.10, 52% had never used the Research Reports. The information in that table was derived from responses to question 38 of the Individual User Questionnaire. According to Table 4F.11, however, (based on question 40 of the same questionnaire), only 31.4% have never used the Research Reports. So far, it has been the policy to interpret frequency of usage data largely in terms of the less ambiguous frequency of use questions (i.e., questions referring to the classes of usage: never, 1-5, 6+). It must be understood, however, that such information must always be interpreted with great caution, particularly if discrepancies between two related tables exist.

Table 4F.11 seems to indicate that researchers are more satisfied (1 and 2 ratings) with the Reports than non-researchers. This conclusion, however, is barely warranted if one excludes actual non-users in both groups from consideration. The same is true for the apparent difference between those who published and those who did not. Of the respondents in either group who actually used the Research Reports, only half gave them a top rating (1 or 2).

Percentages of respondents in various professional groups who gave particular ratings can be read directly from Table 4F.11. It is worth noting, however, that of people in these groups who actually used the reports, "administrators" gave few high (1 or 2) ratings. About three of every ten administrators rated the reports high versus roughly six out of ten respondents in teaching, R & D, and library, and five of ten respondents, in the graduate group.

TABLE 4F.1

NUMBER OF TIMES ERIC PUBLICATIONS USED DURING 1970

	1-5	6-10	11-25	More Than 25	Never Used	No Response
Accumulated Indexes for RIE	25.9% (128)	11.5% (57)	22.9% (113)	3.2% (16)	16.6% (82)	19.8% (98)
Pacesetters in Innovation	17.0 (84)	3.6 (18)	3.6 (18)	9.3 (46)	39.1 (193)	27.3 (135)
Catalog of selected Documents on the Disadvantaged	14.4 (71)	5.3 (26)	2.6 (13)	9.7 (48)	39.7 (196)	28.3 (140)
Selected Documents in Higher Education	11.1 (55)	4.5 (22)	2.0 (10)	10.7 (53)	42.9 (212)	28.7 (142)
Thesaurus of ERIC Descriptors	24.7 (122)	10.7 (53)	12.6 (62)	5.1 (25)	24.1 (119)	22.9 (113)
Manpower Research Inventory	10.3 (51)	2.6 (13)	.8 (4)	11.1 (55)	45.7 (226)	29.4 (145)
OE Research Reports	16.6 (82)	5.9 (29)	4.5 (22)	7.7 (38)	38.5 (190)	26.9 (133)

N = 494

Source: Individual User Questionnaire

TABLE 4F.2

FREQUENCY OF USE OF PACESETTERS IN INNOVATION DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	51.2%	30.2%	18.6%	100% (43)
Teaching	64.8	22.5	12.7	100% (71)
Pupil Pers. Serv.	----	----	----	---- (2)*
R & D	48.5	27.3	24.2	100% (33)
Library	42.2	31.1	26.7	100% (45)
Consulting	45.5	45.5	9.1	100% (11)
Undergraduate	78.6	0.0	21.4	100% (14)
Graduate	55.1	15.9	29.0	100%(107)
Other	50.0	27.8	22.2	100% (18)
Overall	54.4	23.3	22.4	100%(344)**
Conducted Research				
Yes	47.8	25.5	26.8	100%(157)
No	56.0	22.6	21.4	100%(168)**
Published				
Yes	47.4	25.8	26.8	100% (97)
No	56.0	23.0	21.0	100%(243)**

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4F.3

EVALUATION OF PACESETTERS IN INNOVATION

	Very Useful 1	2	3	4	No Use 5	Never Used 6	(N)
Occupation							
Administration	13.9%	16.7%	22.2%	5.6%	0.0%	41.7%	100% (36)
Teaching	8.6	10.0	7.1	4.3	10.0	60.0	100% (70)
Pupil Pers. Serv.	----	----	----	----	----	----	---- (3)*
R & D	16.7	5.6	11.1	2.8	5.6	58.3	100% (36)
Library	10.2	12.2	18.4	16.3	4.1	38.8	100% (49)
Consulting	22.2	11.1	22.2	11.1	0.0	33.3	100% (9)
Undergraduate	6.3	0.0	0.0	0.0	12.5	81.3	100% (16)
Graduate	3.7	5.6	12.0	2.8	0.9	75.0	100%(108)
Other	6.3	12.5	31.3	6.3	0.0	43.8	100% (16)
Overall	9.0	8.7	13.4	5.5	4.1	59.2	100%(343)**
Conducted Research							
Yes	10.5	7.8	16.3	6.5	3.3	55.6	100%(153)
No	7.6	8.8	13.5	5.8	4.1	60.2	100%(171)**
Published							
Yes	5.5	11.0	16.5	8.8	5.5	52.7	100% (91)
No	11.1	7.5	13.1	5.2	3.2	59.9	100%(252)**
Organizations	13.3	13.3	23.9	22.9	1.6	25.0	100%(188)

Source: Individual User and Organization Questionnaires
*** Where N<5, calculations have been omitted.**
**** Totals differ because number of respondents differed.**

TABLE 4F.4

FREQUENCY OF USE OF CATALOG OF SELECTED DOCUMENTS ON THE DISADVANTAGED DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	53.7%	22.0%	24.4%	100% (41)
Teaching	60.0	24.3	15.7	100% (70)
Pupil Pers. Serv.	----	----	----	---- (2)*
R & D	44.4	33.3	22.2	100% (36)
Library	40.0	26.7	33.3	100% (45)
Consulting	55.6	0.0	44.4	100% (9)
Undergraduate	64.3	14.3	21.4	100% (14)
Graduate	59.0	12.4	28.6	100%(105)
Other	70.6	23.5	5.9	100% (17)
Overall	54.6	20.6	24.5	100%(339)**
Conducted Research				
Yes	53.3	20.4	26.3	100%(152)
No	53.3	20.7	26.0	100%(169)**
Published				
Yes	48.4	24.2	27.4	100% (95)
No	57.5	19.2	23.3	100%(240)**

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4F.5

EVALUATION OF CATALOG OF SELECTED DOCUMENTS ON THE DISADVANTAGED

(In Percentages)

	Very Useful				No Use	Never Used	
	1	2	3	4	5	6	(N)
Occupation							
Administration	11.4%	17.1%	20.0%	11.4%	0.0%	40.0%	100% (35)
Teaching	13.4	8.7	10.1	4.3	5.8	58.0	100% (69)
Pupil Pers. Serv.	----	----	----	----	----	----	(3)*
R & D	10.3	5.1	20.5	17.9	2.6	43.6	100% (39)
Library	13.7	17.6	11.8	15.7	3.9	37.3	100% (51)
Consulting	50.0	0.0	20.0	0.0	0.0	30.0	100% (10)
Undergraduate	18.7	0.0	0.0	0.0	12.5	68.8	100% (16)
Graduate	5.4	5.4	8.0	4.5	3.6	73.2	100%(112)
Other	7.7	0.0	23.1	15.4	0.0	53.8	100% (13)
Overall	11.5	8.6	12.1	8.3	3.7	55.7	100%(348)**
Conducted Research							
Yes	9.3	6.6	17.2	9.9	2.6	54.3	100%(151)
No	12.3	10.1	8.4	7.8	4.5	57.0	100%(179)**
Published							
Yes	13.0	8.0	20.0	12.0	3.0	44.0	100%(100)
No	10.7	9.8	9.0	6.6	3.7	60.2	100%(244)**
Organizations	9.1	13.9	28.3	19.8	1.6	27.3	100%(187)

Source: Individual User and Organization Questionnaires
* Where N<5, calculations have been omitted.
** Totals differ because number of respondents differed.

TABLE 4F.6

FREQUENCY OF USE OF SELECTED DOCUMENTS IN HIGHER EDUCATION DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	64.1%	23.1%	12.8%	100% (39)
Teaching	62.9	15.7	21.4	100% (70)
Pupil Pers. Serv.	----	----	----	---- (2)*
R & D	61.1	16.7	22.2	100% (36)
Library	51.1	20.0	28.9	100% (45)
Consulting	55.6	22.2	22.2	100% (9)
Undergraduate	66.7	13.3	20.0	100% (15)
Graduate	59.4	11.3	29.2	100%(106)
Other	68.8	12.5	18.7	100% (16)
Overall	60.1	16.0	24.0	100%(338)**
Conducted Research				
Yes	56.0	18.7	25.3	100%(150)
No	58.8	15.3	25.9	100%(170)**
Published				
Yes	49.5	23.7	26.9	100% (93)
No	63.7	13.3	22.9	100%(240)**

Source: Individual User Questionnaire
* Where $N<5$, calculations have been omitted.
** Totals differ because response rates differ.

TABLE 4F.7

EVALUATION OF SELECTED DOCUMENTS IN HIGHER EDUCATION

	Very Useful				No Use	Never Used	(N)
	1	2	3	4	5	6	
Occupation							
Administration	8.8%	11.8%	14.7%	20.6%	5.9%	38.2%	100% (34)
Teaching	4.4	13.2	5.9	5.9	10.3	60.3	100% (68)
Pupil Pers. Serv.	--	--	--	--	--	--	-- (3)*
R & D	8.6	11.4	8.6	2.9	5.7	62.9	100% (35)
Library	8.9	17.8	8.9	13.3	6.7	44.4	100% (45)
Consulting	30.0	20.0	10.0	10.0	0.0	30.0	100% (10)
Undergraduate	12.5	0.0	0.0	0.0	12.5	75.0	100% (16)
Graduate	6.5	3.7	9.3	2.8	2.8	75.0	100%(108)
Other	8.2	8.3	0.0	0.0	0.0	83.3	100% (12)
Overall	8.2	9.7	8.5	6.6	5.7	61.8	100%(330)
Conducted Research							
Yes	9.5	10.9	8.8	7.5	4.1	59.2	100%(147)
No	7.6	8.8	8.2	6.5	7.1	61.8	100%(170)
Published							
Yes	10.4	12.5	10.4	6.3	5.2	55.2	100% (96)
No	8.1	9.0	8.1	6.4	5.6	62.8	100%(234)**
Organizations	7.1	9.3	16.4	19.7	3.3	44.3	100%(183)

Source: Individual User Questionnaire.
* Where N<5, calculations were omitted.
** Totals differ because response rates differed.

TABLE 4F.8

FREQUENCY OF USE OF MANPOWER RESEARCH INVENTORY DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	64.3%	21.4%	14.3%	100% (42)
Teaching	73.1	11.9	14.9	100% (67)
Pupil Pers. Serv.	--	--	--	-- (2)*
R & D	67.6	11.8	20.6	100% (34)
Library	60.0	20.0	20.0	100% (45)
Consulting	55.6	22.2	22.2	100% (9)
Undergraduate	73.3	6.7	20.0	100% (15)
Graduate	60.0	13.3	26.7	100%(105)
Other	80.0	6.7	13.3	100% (15)
Overall	65.0	14.7	20.4	100%(334)**
Had Research				
Yes	60.4	17.4	22.1	100%(149)
No	65.1	13.6	21.3	100%(169)**
Published				
Yes	53.2	19.1	27.7	100% (94)
No	69.2	13.1	17.7	100%(237)**

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted
** Totals differ because response rates differ.

TABLE 4F.9

EVALUATION OF MANPOWER RESEARCH INVENTORY

	Very Useful				No Use	Never Used	(N)
	1	2	3	4	5	6	
Occupation							
Administration	3.0%	18.2%	12.1%	9.1%	9.1%	48.5%	100% (33)
Teaching	4.5	6.1	6.1	4.5	3.0	75.8	100% (66)
Pupil Pers. Serv.	--	--	--	--	--	--	-- (3)*
R & D	5.7	14.3	11.3	14.3	0.0	54.3	100% (35)
Library	6.7	4.4	17.8	20.0	2.2	48.9	100% (45)
Consulting	22.2	11.1	11.1	11.1	0.0	44.4	100% (9)
Undergraduate	0.0	6.3	6.3	6.3	6.3	75.0	100% (16)
Graduate	2.8	8.5	6.6	1.9	2.8	77.4	100%(106)
Other	0.0	18.5	18.2	0.0	0.0	63.6	100% (11)
Overall1	4.6	9.3	9.6	7.4	3.1	66.0	100%(324)**
Conducted Research							
Yes	6.3	13.2	9.7	9.0	2.1	59.7	100%(144)
No	3.6	7.9	8.5	6.7	3.6	69.7	100%(165)**
Published							
Yes	4.3	9.8	10.9	12.0	1.1	62.0	100% (92)
No	4.3	10.0	8.3	6.1	3.9	67.4	100%(230)**
Organizations	5.4	8.2	19.1	21.2	2.2	44.0	100%(184)

Source: Individual User Questionnaire.
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4F.10

FREQUENCY OF USE OF OE RESEARCH REPORTS DURING 1970

	Never	1-5 times/yr.	6+ times/yr.	(N)
Occupation				
Administration	52.3%	18.2%	29.5%	100% (44)
Teaching	51.4	28.4	20.3	100% (74)
Pupil Pers. Serv.	--	--	--	-- (2)*
R & D	38.9	30.6	30.6	100% (36)
Library	44.7	29.8	25.5	100% (47)
Consulting	50.0	20.0	30.0	100% (10)
Undergraduate	64.3	14.3	21.4	100% (14)
Graduate	59.2	19.4	21.4	100%(103)
Other	58.8	11.8	29.4	100% (17)
Overall	52.2	23.3	24.5	100%(347)
Conducted Research				
Yes	41.5	28.3	30.2	100%(159)
No	58.8	20.0	21.2	100%(170)**
Published				
Yes	38.4	30.3	31.3	100% (99)
No	57.0	21.3	21.7	100%(244)**

Source: Individual User Questionnaire.
* Where N<5, calculations have been omitted.
** Totals differ because response rates differed.

TABLE 4F.11

EVALUATION OF OE RESEARCH REPORTS

	Very Useful 1	2	3	4	No Use 5	Never Used 6		(N)
Occupation								
Administration	14.3%	8.6%	31.4%	8.6%	5.7%	31.4%	100%	(35)
Teaching	15.3	16.5	13.9	0.0	4.2	50.0	100%	(72)
Pupil Pers. Serv.	--	--	--	--	--	--	--	(3)*
R & D	8.1	27.0	10.8	5.4	2.7	45.9	100%	(37)
Library	9.3	20.9	9.3	9.3	2.3	48.8	100%	(43)
Consulting	30.0	20.0	0.0	20.0	0.0	30.0	100%	(10)
Undergraduate	6.3	6.3	6.3	0.0	6.3	75.0	100%	(16)
Graduate	5.8	7.7	9.6	3.8	0.0	73.1	100%	(104)
Other	7.7	15.4	7.7	0.0	0.0	69.2	100%	(13)
Overall	10.5	14.1	12.3	4.5	2.4	56.2	100%	(333)**
Conducted Research								
Yes	13.4	22.8	12.8	4.0	0.7	46.3	100%	(149)
No	8.3	9.5	11.9	4.8	3.0	62.5	100%	(168)**
Published								
Yes	13.7	21.1	13.9	6.3	2.1	43.2	100%	(95)
No	9.4	11.5	12.0	3.8	2.6	60.7	100%	(234)**
Organizations	10.8	19.4	18.3	16.1	1.6	33.9	100%	(186)

Source: Individual User Questionnaire.
* Where N<5, calculations were omitted.
** Totals differ because response rates differed.

TABLE 4F.12

FREQUENCY OF PURCHASE OF ERIC SPECIAL DOCUMENT COLLECTIONS

Publication	Number of Sets Sold	
	1968	1970
Manpower Research Inventory		
FY 1966-67 OE12036	125	2,200
FY 1968 OE12036-68		817
FY 1969 OE12036-69		464
Selected Documents on the Disadvantaged	188	6,269
Pacesetters in Innovation		
FY 1966-68	430	
FY 1966-69		1,281
OE Research Reports 1956-65 OE12028	181	2,878
Higher Education Documents*	---	-----

Source: EDRS Sales Records
* Not available for sale

TABLE 4F.13

ESTIMATED MEAN USAGE PER INDIVIDUAL OF SPECIAL DOCUMENT COLLECTIONS DURING 1970 BY OCCUPATION

Occupation	Pacesetters in Innovation	Catalog of Selected Doc. on the Disadvantaged	Catalog of Selected Doc. in Higher Educ.	Manpower Research Inventory	Research Reports
Administration	5.19	5.54	3.64	4.21	6.45
Teaching	3.59	3.87	5.40	4.09	4.91
Pupil Pers. Service	N<5	N<5	N<5	N<5	N<5
R & D	6.39	5.44	5.61	5.50	7.03
Library	7.07	7.47	7.24	5.60	6.00
Consluting	3.45	8.89	5.78	6.22	6.60
Undergraduate	4.93	4.71	5.00	5.22	4.71
Graduate	7.14	6.09	7.07	7.07	4.85
Other	5.94	1.88	4.69	3.53	6.24
Overall	5.85	5.53	5.99	5.53	5.60

Source: Individual User Questionnaire
Note: Where N<5, calculations have been omitted

TABLE 4F.14

ESTIMATED MEAN USAGE PER INDIVIDUAL OF SPECIAL DOCUMENTS DURING 1970 BY PRIMARY ASSOCIATION

Assocation	Pacesetters in Innovation	Catalog of Selected Doc. on the Disadvantaged	Catalog of Selected Doc. in Higher Educ.	Manpower Research Inventory	Research Reports
Pre-School	10.20	16.50	N<5	N<5	3.33
Elementary School	3.59	3.50	3.67	2.86	4.32
Secondary School	8.30	4.67	9.41	8.35	8.83
College or University	6.04	5.2	6.20	6.01	5.26
State Dept. of Education	6.33	5.00	7.10	7.40	5.44
Regional Ed. Laboratory	4.32	6.67	4.60	3.63	4.86
R & D Center	7.00	7.40	5.73	5.73	6.27
Professional Organization	N<5	N<5	N<5	N<5	N<5*
OE Regional Office	N<5	N<5	N<5	N<5	N<5
Other Federal Agency	3.80	2.33	2.33	2.20	2.33
Local/Regional Info. Center	N<5	N<5	N<5	N<5	N<5
Business or Industry	N<5	N<5	N<5	N<5	N<5
Other	6.91	5.03	5.88	6.40	7.73
Overall	5.95	5.28	6.07	5.73	5.64

Source: Individual User Questionnaire

VOLUME I - Chapter 4

MAKING DOCUMENTS AVAILABLE

Section G

Some Comparisons of Indexing Journals in Education

Section G

SOME COMPARISONS OF INDEXING JOURNALS IN EDUCATION

This phase of the survey was to study the availability, use, and usefulness of ERIC users of Research in Education (RIE) and Current Index to Journals in Education (CIJE) in comparison with five other abstracting and indexing publications relating to education. Descriptive data were collected and analyzed from respondents of the four principal ERIC user groups querried by the survey, i.e., individual users, RIE subscribers, CIJE subscribers, and subscribers to representative professional educational journals. (For further information on data gathering instruments, see Chapter A-1 of this report.) The fact that only users or potential users of ERIC products and services were sampled should be taken into account in interpretation of data presented and particularly with regard to comparisons between ERIC and non-ERIC publications among the seven indexing journals studied.

All of the indexing journals studied cover the published periodical literature with the exception of Research in Education, which covers the report literature, and Dissertation Abstracts. Current Index to Journals in Education, Education Index, and Research in Education were examined more closely for purposes of this comparative study, since the other secondary publications have either a more limited scope or their widest coverage is outside education. Research in Education (newly published in 1966) and Current Index to Journals in Education (newly published in 1969) are the principal

ERIC announcement publications prepared or supported by the Office of Education.

The following aspects of availability, use and usefulness of the abstracting and indexing services were studied:

1. Availability
2. Choice of index journals when more than one is available
3. Frequency of use
4. Comparative Usefulness of CIJE
5. Ways in which used

Scope of Indexing Journals

The following abstracting and indexing journals concerned directly and peripherally with the published and report literature relating to education were selected for comparative study:

Child Development Abstracts & Bibliography (quarterly) covers 133 international periodicals and has exchange agreements with 10 other abstract journals.

Current Index to Journals in Education (monthly) covers more than 500 major educational and education-related publications and includes a main entry section with annotations.

Dissertation Abstracts (monthly) compiles abstracts of doctoral dissertations from 290 institutions in the U.S. and Canada and has agreements with European Universities.

Education Index (monthly) gives citations for 240 educational periodicals. It is concerned exclusively with education, but not restricted to specific areas within the field.

Educational Administration Abstracts (tri-annual) is the most limited of the indexes, covering 86 journals concerned with school administration.

Psychological Abstracts (monthly) covers 493 periodicals in diverse fields and is aimed at psychologists, researchers, doctors, and those in related fields.

Research in Education (monthly) is an abstract journal reporting recently completed research reports, descriptions of outstanding programs, and other documents of educational significance.

Availability

Respondents among individual subscribers to professional educational journals revealed that all three of the principal indexing journals studied, i.e., CIJE, Education Index, and RIE, were available to 50% of their number. This proportion lowers to overall 28% availability if non-respondents are taken into account. (See Tables 4G.1-3.)

Respondents were asked to indicate availability of each journal separately; the journals in pairs; and all three. Overall thirty-nine percent of the respondents to the question on convenient availability of the three journals, separately or in combination, chose to ignore this question, which fact can reasonably be interpreted as indicating non-use of any one of the three index journals.

Seventeen percent of respondents reported having only one educational indexing journal available. Among these persons Education Index was the journal most available (13%) among the three studied; RIE followed with 10% availability and CIJE with 5%. (These figures become 8%, 7%, and 3% respectively when non-respondents are considered. (Table 4G.3) When respondents were asked to indicate availability of the journals in pairs, Education Index and RIE were more often available to respondents (14%) as against CIJE and Education Index with 9% availability. CIJE and RIE followed with only 2% indicating separate availability of this combination.

(This data for the journals separately and in pairs should not be considered apart from the data discussed below reporting availability of all three indexing journals, which probably reflects the condition of most libraries and information centers with full ERIC collections.)

Availability of all three index journals by respondent's occupational category is shown in Table 4G.3. Availability of all three index journals is in excess of 40% among all occupational categories with an overall indicated availability of 49%, as indicated earlier. Availability was highest among undergraduate and graduate students, teachers, librarians and consultants in that order. It is noted that Education Index and Research in Education were considered equally available by R & D people. Education Index ranks highest in availability among teachers and administrators. CIJE is correspondingly low in all categories except undergraduate students where it outranks the other two journals (but on a small sample size).

Choice of Index Journals When More Than One is Available

When more than one indexing journal was available to respondent subscribers to professional journals, Education Index was used more frequently (23%) than RIE (21%) or CIJE (6%).

This general question, however, registered a 51% non-response rate indicating possible unfamiliarity with one or more of the journals. (See Tables 4G. 4-5) By occupation, respondents indicated that one-half of teachers prefer Education Index as against 39% for RIE and 11% for CIJE (Table 4G.6). Among administrators, Education Index and RIE are equally preferred with CIJE registering about one-half of that level of use. Among librarians, consultants, and graduate students, Research in Education outperforms Education Index substantially with CIJE ranking first in use only with undergraduate students (This later data should be viewed with caution because of the small sample).

Frequency of Use

In a related effort to determine the rate of use of the journals studied, another questionnaire solicited similar responses from individual users of ERIC products and services (see Table 4G.7). RIE ranked first among these respondents with 72% recording some use of RIE. Education Index was next most used by 68% and CIJE followed with 54% of respondents indicating use of this journal. The other four indexing and abstracting journals studied had a level of use in this order: Dissertation Abstracts (50%), Psychological Abstracts (38%), Educational Administration Abstracts (18%), and Child Development Abstracts and Bibliography (18%).

Comparative Usefulness of CIJE

Individual users were also asked, "How do you think CIJE compares in usefulness with other such indexes you have used?" (This question was not asked of users of RIE because no other indexing journal covers reports and other non-periodical literature.) Approximately one-third of the respondents to the individual user questionnaire found CIJE "equally useful"; almost one-fourth found it "more useful" and only 5% found it "less useful" when compared to other index journals (see Table 4G.8). Here again, however, the non-response rate was high (43%), corresponding roughly to the non-response rate among individual subscribers to professional educational journals. If only respondents to the question were considered, and presumably these included actual users of CIJE, 53% of users found it "equally useful" as compared to other index journals. In a breakdown by respondent's degree level, one-half of individual respondents with bachelors, masters, and doctoral degrees found CIJE "equally useful," about 40% regarded it as "more useful,' and less than 10% voted "less useful."

Ways in Which Indexing Journals were Used During 1970

Data on this important question was obtained both from respondents to the individual user questionnaire and respondent subscribers to Research in Education. It is revealing that subscribers to RIE, 95% of whom are institutional, differed markedly from individual users of ERIC products and services in their views as to how RIE was used. For example two-thirds of the individual users overall indicated that RIE was used primarily to search past issues or volumes to locate specific information. Less than one-fifth of the individual users reported that they read or scan each issue of RIE for current awareness. Less than 10% reported using RIE for both purposes.

On the other hand, institutional subscribers to RIE reported use of the journal only 40% of the time to search past issues to locate specific information. At the same time, approximately one-fourth of the respondents reported using RIE to read or scan for current awareness. A slightly higher percentage of subscribers reported using RIE for both purposes.

Ways in which each indexing journal was used during the past year by the respondent's occupation are reported in Tables 4G.10-14, and in Tables 4D.7 (RIE) and 4E.5 (CIJE). Highlights of use for each journal are noted as follows:

Child Development Abstracts and Bibliography was reported used by the smallest number of respondents (214 out of 494). Almost two-thirds of those responding reported never using this journal. The largest percentage of use (46%) was by librarians in searching past issues or volumes to locate specific information.

Dissertation Abstracts. Approximately two-thirds of all users indicated that this journal was used primarily to search for specific information. Only 22% of respondents indicated that they had never used this journal. It should be noted also that respondents who had not conducted research reported greater use than researchers of Dissertation Abstracts, with indications of uniformly heavy use by librarians, teachers, administrators and graduate students.

Current Index to Journals in Education. Almost two-thirds of individual respondents reported use of CIJE primarily to search past issues to locate specific information. Only 14% read or scan each issue for current awareness, and a bare 6% use CIJE for both purposes. CIJE was reported used by librarians and graduate students primarily for searching for information. Teachers also reported a high percentage use (60%) for this purpose. (See Table 4E.5)

Education Index. Of all the journals examined, Education Index recorded the highest percentage of users indicating primary use for search past issues to locate specific information (70% as against 67% for RIE and 62% for CIJE). Respondents indicated a low 10% "never used" as compared to 8% for RIE and 18% for CIJE. In the categories of graduate students, research and development personnel, librarians, and administrators, more than two-thirds of use was directed to searching past issues to locate specific information.

Education Administration Abstracts. Almost two-thirds of a low number of respondents (217 out of 494) reported "never used" for this journal. Non-use was especially high among teachers and students. School administrators indicated greater use of this indexing journal than other occupational categories, but even here, 43% reported "never used." Approximately one-third of school administrators and librarians responding indicated preference for use of this journal in searching to locate specific information. One-fifth of school administrators responding reported that they read or scan each issue for current awareness.

Psychological Abstracts. Data from the individual user questionnaire indicated there is widespread use of Psychological Abstracts among ERIC users. Outside the three principal journals studied, Psychological Abstracts ranked next to Dissertation Abstracts in recording a low percentage of non-use compared to the other five indexing journals. Overall, 53% of respondents indicate primary use of Psychological Abstracts for the purpose of retrospective searching. Only 11% reported using this journal for current awareness. Librarians and teachers reported the heaviest use of Psychological Abstracts, each category showing approximately 80% use. Of those searching past issues to locate specific information, teachers ranked highest with librarians and graduate students next in order. Again, with respect to use in research, respondents indicated wider use among non-researchers than those active in research.

Research in Education. As indicated above, RIE had the lowest percentage of respondents reporting "never used." (See Table 4D.7) RIE also had the distinction of being used most often among all the indexing journals studied for reading or scanning each issue for current awareness. Only Education Index surpassed RIE for use in searching past issues to locate specific information (69% as compared to 67%). Graduate students, teachers, and librarians all reported frequent use of RIE for this latter purpose. Almost one-fourth of respondents who reported conducting research indicated that they read or scan RIE for current awareness. On the other hand, non-researchers outnumbered researchers among those who search past issues to locate specific information, confirming the heavy use of RIE by students, teachers, and librarians as reported above.

TABLE 4G.1

INDEX JOURNALS AVAILABLE TO JOURNAL COLUMN READERS*

Journals	Percent	Number
Current Index to Journals in Education (CIJE)	2.9	29
Education Index	7.8	78
Research in Education (RIE)	6.5	66
CIJE and Education Index	5.1	52
CIJE and RIE	1.2	12
Education Index and RIE	8.5	86
CIJE, RIE, and Education Index	28.1	294
No Response	38.9	394
	100.0	1011

Source: Professional Journal Questionnaire
*Respondents were asked to indicate availability of each journal separately; the journals in pairs; and all three. Availability totals are therefore not cumulative.

TABLE 4G.2

AVAILABILITY OF INDEX JOURNALS TO READERS OF ERIC COLUMNS IN PROFESSIONAL JOURNALS

Professional Journals	CIJE	EI	RIE	CIJE EI	CIJE RIE	EI RIE	CIJE, EI, AND RIE	No Response	(N)
Audio-Visual	3.7% (4)	8.3% (9)	6.5% (7)	9.2% (10)	.9% (1)	5.6% (6)	31.4% (34)	34.4% (37)	100% (108)
Exceptional Children	1.8 (6)	4.9 (16)	4.6 (15)	4.3 (14)	.6 (2)	8.8 (29)	25.9 (85)	49.1 (161)	100% (328)
Foreign Language Annals	4.4 (7)	7.5 (12)	5.7 (9)	6.3 (10)	1.9 (3)	5.7 (9)	23.9 (38)	44.0 (71)	100% (159)
Journal of Teacher Ed.	1.7 (2)	5.2 (6)	6.0 (7)	2.6 (3)	1.7 (2)	14.7 (17)	54.3 (63)	13.8 (16)	100% (116)
Reading Teacher	3.3 (10)	11.7 (35)	9.3 (28)	5.0 (15)	1.3 (4)	8.3 (25)	24.7 (74)	36.0 (109)	100% (300)
Overall	2.9 (29)	7.8 (78)	6.5 (66)	5.1 (52)	1.2 (12)	8.5 (86)	28.1 (294)	38.9 (394)	100% (1011)

Source: Professional Journal Questionnaire

TABLE 4G.3

AVAILABILITY OF INDEX JOURNALS TO RESPONDENTS BY OCCUPATION

Occupation	CIJE	Education Index	RIE	CIJE and Education Index	CIJE and RIE	Education Index and RIE	All Three	(N)
Administration	8.8%	12.7%	12.2%	6.1%	3.3%	11.6%	45.3%	100% (181)
Teaching	3.1	14.2	8.6	10.2	1.5	13.3	49.1	100% (324)
Pupil Pers. Serv.	----	----	----	----	----	----	----	---- (3)*
R & D	8.2	16.7	16.7	0.0	0.0	16.7	41.7	100% (12)
Library	0.0	4.8	14.3	14.3	0.0	19.0	47.6	100% (21)
Consulting	2.6	10.5	15.8	7.9	0.0	15.8	47.4	100% (38)
Undergraduate	11.1	0.0	0.0	11.1	0.0	0.0	77.8	100% (9)
Graduate	0.0	0.0	5.9	5.9	0.0	23.5	64.7	100% (17)
Other	0.0	20.0	0.0	0.0	0.0	40.0	40.0	100% (5)
Overall	4.8	12.6	10.2	8.5	1.8	13.6	48.5	100% (610)

Source: Professional Journal Questionnaire
* Where N<5, calculations have been omitted.

TABLE 4G.4

JOURNAL INDEX USED MOST FREQUENTLY BY JOURNAL COLUMN READERS

CIJE	Education Index	RIE	No Response	
6.3%	22.3%	20.3%	51.0%	100.0%
(64)	(225)	(206)	(516)	(1011)

Source: Professional Journal Questionnaire

TABLE 4G.5

CHOICE OF INDEX JOURNALS WHEN MORE THAN ONE IS AVAILABLE TO SUBSCRIBERS OF PROFESSIONAL JOURNALS

Professional Journals	Current Index to Journals in Education		Education Index		Research in Education		No Response		(N)	
Audio-Visual	5.6%	(6)	25.0%	(27)	22.2%	(24)	46.2%	(51)	100%	(108)
Exceptional Children	6.4	(21)	17.1	(56)	17.7	(58)	58.8	(193)	100%	(328)
Foreign Language Annals	8.8	(14)	14.5	(23)	17.0	(27)	59.7	(95)	100%	(159)
Journal of Teacher Education	7.8	(9)	39.7	(46)	30.2	(35)	22.3	(26)	100%	(116)
Reading Teacher	4.7	(14)	24.3	(73)	20.7	(62)	50.3	(151)	100%	(300)
Overall	6.3	(64)	22.3	(225)	20.3	(206)	51.0	(516)	100%	(1011

Source: Professional Journal Questionnaire

TABLE 4G.6

CHOICE OF INDEX JOURNAL OF THOSE WHO HAVE MORE THAN ONE AVAILABLE

BY OCCUPATION

Occupation	CIJE	Education Index	RIE	(N)*
Administration	21.0	39.0	40.0	100%(100)
Teaching	11.3	49.5	39.2	100%(212)
Pupil Pers. Serv.	--	--	--	100% (1)
R & D	14.3	28.6	57.1	100% (7)
Library	0.0	35.7	64.3	100% (14)
Consulting	3.6	42.9	53.9	100% (28)
Undergraduate	50.0	50.0	0.0	100% (6)
Graduate	7.1	42.9	50.0	100% (14)
Other	0.0	25.0	75.0	100% (4)
Overall	13.5	44.8	41.7	100%(386)

Source: Professional Journal Questionnaire

*Non-response rate not calculated.

TABLE 4G.7

RATE OF USE OF RIE AND CIJE BY ERIC USERS IN COMPARISON WITH OTHER SECONDARY ANNOUNCEMENT BULLETINS

N = 494

Index Journals	Percent	(N)
RIE	71.9	355
CIJE	54.4	268
Education Index	67.8	325
Dissertation Abstracts	49.8	242
Psychological Abstracts	38.2	199
Educational Administration Abstracts	18.0	89
Child Development Abstracts & Bibliography	17.6	87
Others	7.4	37

Source: Individual User Questionnaire

TABLE 4G.8

USEFULNESS OF CIJE COMPARED TO OTHER INDEXES

	Percent	Number
Less useful	4.7	23
Equally useful	30.4	150
More useful	22.1	109
No Response	42.8	212
	100.0	494

Source: Individual User Questionnaire

TABLE 4G.9

COMPARATIVE USEFULNESS OF CIJE WITH OTHER INDEXES BY RESPONDENT'S DEGREE LEVEL

Degree Level	Less Useful	Equally Useful	More Useful	(N)	
High School Diploma	28.6%	28.6%	42.9%	100%	(7)
Bachelor's	5.8	50.0	44.2	100%	(86)
Master's	9.1	53.8	37.1	100%	(143)
Specialist's	----	----	----	----	(2)*
Doctorate	4.0	52.0	44.0	100%	(25)
Other	----	----	----	----	(4)*
Overall	8.2	52.1	39.7	100%	(267)

Source: Individual User Questionnaire

* Where N<5, calculations have been omitted.

TABLE 4G.10

WAYS IN WHICH CHILD DEVELOPMENT ABSTRACTS AND BIBLIOGRAPHY WAS USED DURING 1970 BY RESPONDENT'S OCCUPATION

Occupation	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used	(N)
Administration or Supervision	15.4	34.6	3.8	46.2	100% (2
Teaching	15.2	23.9	4.3	56.5	100% (4
Pupil Personnel Services	----	----	----	----	---- (1
Research and Development Center	4.0	20.0	0.0	76.0	100% (25
Library or Instructional Resources	6.1	45.5	12.1	36.4	100% (33
Consulting	----	----	----	----	---- (4
Undergraduate	12.5	12.5	0.0	75.0	100% (8
Graduate	4.7	15.6	0.0	79.7	100% (64
Other	14.3	28.6	0.0	57.1	100% (7
Overall	9.8	24.8	3.3	62.1	100%(214
Conducted Research					
Yes	9.1	20.0	3.6	67.3	100%(110
No	12.2	30.0	2.2	55.6	100% (90
Published					
Yes	7.1	23.8	3.3	60.9	100% (56
No	11.9	23.8	3.3	60.9	100%(151

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted.

TABLE 4G.11

WAYS IN WHICH DISSERTATION ABSTRACTS WAS USED DURING 1970 BY RESPONDENT'S OCCUPATION

Occupation	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used	(N)
Administration or Supervision	17.6	61.8	8.8	11.8	100% (34)
Teaching	14.7	61.8	7.4	16.2	100% (68)
Pupil Personnel Services	----	----	----	----	---- (2)*
Research and Development Center	11.1	66.7	0.0	22.2	100% (36)
Library or Instructional Resources	7.5	67.5	10.0	15.0	100% (40)
Consulting	16.7	66.7	0.0	16.7	100% (6)
Undergraduate	11.1	33.3	0.0	55.6	100% (9)
Graduate	7.3	61.5	3.1	38.1	100% (96)
Other	0.0	60.0	10.0	30.0	100% (10)
Overall	10.6	61.8	5.6	21.9	100%(301)
Conducted Research					
Yes	7.6	58.3	4.9	29.2	100%(144)
No	13.3	66.7	6.7	13.3	100%(135)
Published					
Yes	14.9	64.4	6.9	13.8	100% (87)
No	8.4	61.9	4.0	25.7	100%(202)

Source: Individual User Questionnaire
* Where N<5, calculations have been omitted.

TABLE 4G.12

WAYS IN WHICH EDUCATION INDEX WAS USED DURING 1970 BY RESPONDENT'S OCCUPATION

	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used		(N)
Occupation						
Administration or Supervision	20.5	66.7	5.1	7.7	100%	(39)
Teaching	22.8	62.0	8.9	6.3	100%	(79)
Pupil Personnel Services	—	—	—	—	—	(4)*
Research and Development Center	13.2	73.7	0.0	13.2	100%	(38)
Library or Instructional Resources	12.0	72.0	14.0	2.0	100%	(50)
Consulting	25.0	62.5	0.0	12.5	100%	(8)
Undergraduate	0.0	44.4	11.1	44.4	100%	(9)
Graduate	9.5	76.2	2.9	11.4	100%	(105)
Other	0.0	81.8	9.1	9.1	100%	(11)
Overall	14.3	69.7	6.4	9.6	100%	(343)
Conducted Research						
Yes	11.7	67.8	8.2	12.3	100%	(171)
No	20.4	69.7	4.6	5.3	100%	(152)
Published						
Yes	20.2	66.3	5.6	7.9	100%	(89)
No	13.7	71.4	6.0	8.9	100%	(248)

Source: Individual User Questionnaire.
* Where N<5, Calculations have been omitted.

TABLE 4G.13

WAYS IN WHICH EDUCATIONAL ADMINISTRATION ABSTRACTS WAS USED DURING 1970 BY RESPONDENT'S OCCUPATION

Occupation	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used	(N)
Administration or Supervision	20.0	36.7	0.0	43.3	100% (30)
Teaching	10.2	22.4	4.1	63.3	100% (49)
Pupil Personnel Services	----	----	----	----	---- (1)*
Research and Development Center	4.0	32.0	4.0	60.0	100% (25)
Library or Instructional Resources	6.7	36.7	6.7	50.0	100% (30)
Consulting	40.0	20.0	0.0	40.0	100% (5)
Undergraduate	0.0	14.3	14.3	71.4	100% (7)
Graduate	4.7	18.7	3.1	73.4	100% (64)
Other	0.0	0.0	16.7	83.3	100% (6)
Overall	8.8	25.3	4.1	61.8	100%(217)
Conducted Research					
Yes	4.7	22.6	3.8	68.9	100%(106)
No	13.9	26.7	5.0	54.5	100%(101)
Published					
Yes	10.8	30.8	3.1	55.4	100% (65)
No	8.8	24.3	4.7	62.2	100%(148)

Source: Individual User Questionnaire

* Where N<5, calculations have been omitted.

TABLE 4G.14

WAYS IN WHICH PSYCHOLOGICAL ABSTRACTS WAS USED DURING 1970 BY RESPONDENT'S OCCUPATION

	Read or scan each issue for current awareness	Search past issues or volumes to locate specific information	Both	Never Used	(N)
Occupation					
Administration or Supervision	4.0	40.0	12.0	44.0	100% (25)
Teaching	13.8	63.8	3.4	19.0	100% (58)
Pupil Personnel Services	----	----	----	----	---- (4)*
Research and Development Center	10.7	46.4	0.0	42.9	100% (28)
Library or Instructional Resources	15.4	59.0	10.3	15.4	100% (39)
Consulting	20.0	60.0	0.0	20.0	100% (5)
Undergraduate	27.3	27.3	0.0	45.5	100% (11)
Graduate	8.5	50.0	1.2	40.2	100% (82)
Other	0.0	55.6	0.0	44.4	100% (9)
Overall	11.1	52.5	4.2	32.2	100%(261)
Conducted Research					
Yes	9.3	47.3	3.9	39.5	100%(129)
No	13.7	59.0	4.3	23.1	100%(117)
Published					
Yes	12.7	56.3	4.2	26.8	100% (71)
No	11.0	51.4	3.9	33.7	100%(181)

Source: Individual User Questionnaire

* Where N<5, calculations have been omitted.